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# RATE RESEARCH

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Oct. 1, 1914 - Mar. 25, 1915



PUBLISHED BY THE  
RATE RESEARCH COMMITTEE  
OF THE

NATIONAL ELECTRIC LIGHT ASSOCIATION

120 WEST ADAMS STREET - - - CHICAGO

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**Minimum Charge.**

50 cents per month per meter.

**Prompt Payment Discount.**

10% when bills are paid on or before the 10th day of the month following the month in which service is rendered.

**POWER RATE.****Rate.**

- 10 cents per kilowatt-hour for the first 100 kilowatt-hours' use per month.
- 8 cents per kilowatt-hour for the next 100 kilowatt-hours' use per month.
- 7 cents per kilowatt-hour for the next 200 kilowatt-hours' use per month.
- 6 cents per kilowatt-hour for the next 200 kilowatt-hours' use per month.
- 4 cents per kilowatt-hour for all additional use per month.

**Minimum Charge.**

50 cents per month per meter.

**Prompt Payment Discount.**

10% when bills are paid on or before the 10th day of the month following the month in which service is rendered.

**COOKING RATE.****Rate.**

4½ cents per kilowatt-hour for current used to supply electric range for cooking, which service is to be independently metered.

**Minimum Charge.**

\$1.00 per month per meter.

**Prompt Payment Discount.**

10% when bills are paid on or before the 10th day of the month following the month in which service is rendered.

**CALIFORNIA****300—Investment and Return**

THOMAS MONAHAN, MAYOR OF SAN JOSE, v PACIFIC GAS AND ELECTRIC COMPANY. Alleging that the Company's Rates in the San Jose District Are Excessive and That the Service is Inadequate. Decision of the CALIFORNIA RAILROAD COMMISSION, Fixing Rates and Establishing Certain Requirements in Service. August 28, 1914.

The proceeding involved the investigation of rates and service in the entire San Jose district in so far as the Commission has received jurisdiction. The Commission's decision in a similar proceeding involving the company's rates in Antioch was reported in 5 RATE RESEARCH 264.

**226.2—Extension of Service.**

The Complaint was made that the Company's rules and practice in regard to extension of service are unreasonable.

"The evidence in these proceedings shows that in quite a number of cases, both within and without the limits of the city of San Jose, defendant has refused to extend its lines for the service of electric energy unless applicant should agree to advance the cost of the

extension. The arrangement frequently insisted upon by the Electric Company has been that the applicant should advance the entire cost of the extension, not including the cost of the transformer, and that the money so advanced should be repaid in the amount of 20 per cent of the monthly bills for service from the extension. The Electric Company has claimed ownership in all these extensions and not paid interest on the moneys advanced by the applicant. I shall consider first extensions within the limits of incorporated cities and towns and the extensions in unincorporated territory.

"In so far as this question concerns extensions within the limits of incorporated cities and towns, the duty of the Electric Company seems to have been clearly established by the Supreme Court of the United States in the case of *Russell v. Sebastian*, decided on April 5, 1914. In this case, it will be remembered, the city of Los Angeles and other California Municipalities claimed that by reason of the amendment of Section 19 of article XI of the Constitution of this state, adopted on October 10, 1911, utilities using the public streets, including electric utilities, could not make further extensions without complying with such rules and regulations as the cities might under their organic laws establish. The various gas and electric companies of the state earnestly contended that this position was erroneous and that under the constitutional grant of a franchise made by section 19 of article XI as it stood prior to the amendment, any such public utility which had started construction work, in a city prior to October 10, 1911, had secured the right to extend its system throughout all the public streets of the city. The utilities claimed that the state's offer was an offer to grant the use of all the streets within the city and that upon the commencement of construction in any of the streets, the offer was accepted as to all the streets. This contention of the utilities was upheld by the Supreme Court. On this point, Mr. Justice Hughes, in rendering the decision used the following language:

'We think the offer was intended to be accepted in its entirety as made, and that acceptance lay in conduct committing the person accepting to the described service. The offer was made to the individual or corporation undertaking to serve the municipality, and when that service was entered upon and the individual or corporation had changed its position beyond recall, we cannot doubt that the offer was accepted. *City Railway Co. v. Citizens R. I. Co.*, 166 U. S. 557,568; *Grand Trunk Railway Co. v. South Bend*, 227 U. S. 544,556,556. In this view the grant embraced the right to lay the extensions that were needed in furnishing the supply within the City.'

"After thus establishing the right of the utility to use all the streets of the city, Mr. Justice Hughes addresses himself to the correlative duty on the part of the utility to serve all the inhabitants. Referring to this point, Mr. Justice Hughes says:

'This construction of the constitutional provision if the only one that is compatible with the existence of the duty which it was intended, as it seems to us, that the recipient of the state's grant should assume *The service, as has been said, was a community service.* Incident to the undertaking in response to the State's offer was the obligation to provide facilities that were reasonably adequate, (citing cases). It would not be said either that a water company or a gas company establishing its service under the constitutional grant, could stop its mains at its pleasure and withhold its supply by refusing to extend its distributing conduits so as to meet the reasonable requirements of the community. But this duty and the right to serve, embracing the right under the granted privilege to install the means of service, were correlative.'

"The rule thus established by the Supreme Court of the United States is equally sound in law and in common sense. . . . While it is possible that it may be necessary in some of our cities having wide territorial extent, to modify this general rule in some respects, the present case is clearly one for the application of the general rule, I accordingly recommend that the order in this case contain a provision to the effect that the Electric Company shall, at its own cost, make extensions to serve all persons desiring electric service in the city of San Jose and in the other incorporated cities in the San Jose district over which this commission has jurisdiction in this respect. The rate in this case will be established on the theory that the service is community wide, and extensions which may be unprofitable in themselves will be taken care of in the rate so established. . . .

"Considering now the situation in unincorporated territory, I am not sure whether the rule announced by the Supreme Court of the United States would apply to general franchises granted by the county authorities authorizing the use of all the public streets and highways of the county. However, it is not necessary to pass on this question in this case for the reason that, entirely irrespective of this general principle, the Railroad Commission has the power, under the provisions of section 36 of the Public Utilities Act, and other sections, to direct that extensions be made in proper cases. As the Electric Company claims the right to serve the entire San Jose district, this is not a case of an extension into territory beyond that which the utility has heretofore claimed to serve. A number of the outside extensions referred to in the evidence in this case have already been made by the Electric Company since the hearing. In estimating the value of the property of Pacific Gas and Electric Company in this case, I am allowing the entire value of all the estimated extensions which have been asked for and which may reasonably be expected in the near future. Under these circumstances and on the facts as shown in the evidence in these proceedings, I find that the Electric Company should make, at its own cost, all the extensions in outside territory which were referred to in the

evidence in this case and which have not already been made, and should apply to the same principle to such new extensions as may from time to time be asked for in outside territory in this district. If, in any case, the Electric Company considers it unreasonable to make the extension at its sole cost, it may draw the matter to the attention of the Railroad Commission, whereupon the Commission will determine whether any good reason exists for varying from the general rule herein established. It must be borne in mind in this connection that the Commission is in this case allowing over \$191,000 for extensions and betterments in the year 1914, so that the Electric Company may construct such extensions at its own expense at least up to the amount so allowed."

#### 410—Cost of Service.

"By agreement of all the parties, the evidence introduced in Case No. 400, *Town of Antioch vs. Pacific Gas & Electric Company*, (5 RATE RESEARCH 264) was considered in evidence in this case, in so far as applicable. By agreement with the Electric Company, the Commission, in the *Town of Antioch* case, undertook to arrive at an average cost of generating and transmitting electric energy over the Electric Company's entire system in this State. For this purpose this commission, in the *Town of Antioch* considered the value of the Electric Company's entire property used in the generation and transmission of both hydro-electric and steam generated energy. While the Electric Company, in its brief in this case, has made objection to certain of the calculations used in determining this cost of electric energy, I find that the cost as found in the *Town of Antioch* case is at least fair and reasonable cost to be used in so far as applicable in the present proceedings as representing the cost of generating and transmitting electric energy."

The generation and transmission costs as obtained in the Antioch case were revised according to changes in the property since the appraisal was made. These costs and the distribution costs as determined for the San Jose district were used as the basis for rate making in this case.

The decision does not contain an adequate description of the actual working out of these costs and the reasonableness of the Commission's findings and conclusions cannot be satisfactorily checked from the data given.

#### 540—Minimum Charge.

The city of San Jose objects to the minimum charge of \$1.00 per month which has been established by the Electric Company.

All rate fixing authorities concur in the conclusion that the establishment of a reasonable minimum is reasonable and proper. Even if a consumer uses but little electric energy, the utility is entitled to a return on the installation which it has been compelled to make to serve him as well as depreciation thereon. The expense of reading

meters, repairing meters, making collections and keeping accounts is practically as large for the man whose bill is \$5.00 as for one whose bill, irrespective of the minimum, would be only fifty cents. It seems only reasonable and proper that the consumer should bear his fair share of this expense, which is incurred for his benefit, irrespective of the amount of electric energy consumed by him. On the facts of this case I find, that the established minimum of \$1.00 per meter per month is reasonable, and shall accordingly recommend that it be not disturbed.

The city of San Jose complained particularly because of the necessity of paying a minimum of \$1.00 per month in connection with a certain meter in the City Hall for electricity which was used for heating purposes during the winter months and which was not needed during the other portions of the year. Electric utilities generally establish a rule or regulation to the effect that in such cases the meters may be disconnected and that the minimum charge shall not apply during the period of disconnection. The electric Company will undoubtedly include such rule or regulation among those which it will file with this Commission, whereupon the City can have this meter disconnected during such months as the meter may not be in use.

### **720—Rate Schedule.**

The Commission found that there were not sufficient data available upon which to establish a proper power rate for the district. The rates established for general lighting and street lighting are as follows:

#### **GENERAL LIGHTING RATES.**

Applicable to all lighting installations served from the San Jose district distribution system. (Including all lamp socket appliances.)

##### **Rate.**

- 7 cents per kilowatt-hour for the first 20 kilowatt-hours per month.
- 4 cents per kilowatt-hour for the next 330 kilowatt-hours per month.
- 3 cents per kilowatt-hour for all over 350 kilowatt-hours per month.

##### **Minimum Charge.**

\$1.00 per meter per month.

#### **MUNICIPAL STREET LIGHTING RATES.**

Applicable to all street and other public outdoor lighting.

##### **Rate.**

10 cents per year per watt connected.

#### **SPECIAL STREET LIGHTING RATE.**

Applicable to Tower Lighting.

##### **Rate.**

6 cents per year per watt connected.

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**OREGON****580—Terms and Conditions.**

CITY OF SALEM V. SALEM WATER, LIGHT AND POWER COMPANY. Complaint Alleging that the Company's Water Rates Are Unreasonable and Its Service Inadequate. Decision of the RAILROAD COMMISSION OF OREGON, Adjusting Rates and Dismissing the Complaint as to Service. August 19, 1914.

The Commission objected to various rules and regulations of the company.

**540—Minimum Charge.**

"By tariff regulation the defendant claims the right at any time to attach meters to the service pipes of patrons at such places only, as it may deem best, and to charge for the quantity of water measured, or used, at the meter rates carried by its tariffs, if the same exceed the flat rate applicable, but in any event to exact as a minimum the flat rate provided by its tariffs. This regulation of the defendant is unjust and unreasonable and unjustly discriminatory against patrons so arbitrarily placed on metered services. A just and reasonable regulation and practice for the defendant to follow in the future is, in event it has a meter installed, to charge, impose and collect rates based upon the metered service schedule only, subject to the minimum for metered service, and without reference to flat rates."

**616—Official or Government Rates.**

The Commission found that the rate which the city was charged for fire hydrants and cisterns was insufficient as compared with the charges made to private users, considering the relative demands of the service and the relative amount of investment required.

"The effect of such unduly low rates is that patrons who use water have been compelled to pay and now pay more than a reasonable rate for their service to make up the deficiency in returns for service to the City from which they derive no benefit that is not equally shared by taxpayers and property owners who are not patrons of defendant."

**712—Publicity of Schedules.**

"Defendant in its tariff carries a provision as follows:

'Water required for purposes which are not specified in the above tariff, the rate shall be fixed by the superintendent who will, upon personal examination of the premises of any applicant of water, fix upon its rate; his decision being subject to modification by the Board of Directors of the Salem Water, Light and Power Company. The right is reserved by the Directors to amend or add to these rules and regulations, or to change the water rate as experience may show to be necessary or expedient without notice.'

So far as the foregoing regulations of defendant provide for the charging, demanding or collecting of rates other than those contained in the regularly published and filed tariffs of the defendant, or established by order of this Commission: and so far as the defendant attempts to reserve the right to change any of its rates without the notice required by law, the same are unlawful, unreasonable, and unjustly discriminatory."

## **WISCONSIN**

### **315.1 Going Value.**

TOWN OF VAUGHN v. HURLEY WATER COMPANY, Alleging that the Rates are Unreasonable. Decision of the WISCONSIN RAILROAD COMMISSION, Fixing Rates. April 10, 1914.

In determining the valuation of the property of the water utility to be used as a basis for rate making, the Commission discusses an allowance for development costs as follows:

"The fact that the property in this case has been in the hands of the present owners but a little more than two years, appears to leave them in no position to show the complete financial records of its operation. It is therefore, impossible to accurately ascertain the cost of building up the business, or what is usually termed going value.

"That the plant has an intangible element of value as a going concern and an earning value through a developed business, is deemed sufficiently obvious in the light of the facts peculiar to this case, and in the light of what has been said on this subject in previous decisions . . ."

## **REFERENCES**

### **RATES**

#### **614—Heating and Cooking.**

RATES FOR STREET LIGHTING AND FOR COOKING. *Electrical World*, 1 page, September 26, 1914, p. 621.

An abstract of Mr. Hale's paper before the New England Section (See 5 RATE RESEARCH 363) and of the discussion which followed is given.

#### **450—Value of Service Theory.**

DISCRIMINATION IN PUBLIC SERVICE RATES, by H. W. ASHLEY. *Electrical World*,  $\frac{3}{4}$  page, September 26, 1914. p. 624.

In this communication to the *Electrical World*, the recent endorsement of the value of service theory by the Rate Research Committee is adversely criticized. It is said that whether the individual lives in a hotel, an apartment or an isolated house makes little difference in the cost of the energy which each class uses, and any attempt to impose a discrimination of 100, 200 or 400 per cent in price is obviously "unjust" and can hardly be defended either in social or political law.



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**510—Forms of Rates.**

FORM OF RATES. *Southwestern Electrician*, 1 page, September, 1914, p. 24.

Various forms of rates are described namely, the flat rate, the straight line meter rate, the step meter rate and the block meter rate.

**524—Limiting Demand.**

FLAT RATE METERS FOR HEATING AND LIGHTING LOADS, by H. F. HATCH. Read before the Pennsylvania Electric Association at Its Seventh Annual Convention, September 8-11, 1914. 12 pages.

The experience of the Wilmington company with flat-rate meters for heating and lighting loads is related. The article is illustrated by curves compiled from data taken from the company's books.

## INVESTMENT AND RETURN

**360—Depreciation.**

DEPRECIATION, by RALPH U. FITTING. Article and Editorials, *Electric Railway Journal*, 5 pages, September 26, 1914, p. 558 and p. 549.

The above article is an extended analysis of the different kinds of depreciation which may occur in the physical property of a public utility company, the various methods evolved for computing this depreciation and a comparison of their merits and demerits.

The editorial in criticising the article, states that while the student of depreciation problems will be interested chiefly in the clear-cut delineation of depreciation theory and practice the value of the article to the layman lies mostly in the emphasis given to this point—that different reasons for calculating depreciation exist and therefore different methods of calculations may be used. The chief point at issue in appraisal work is that past and future depreciation should be determined as exactly as possible in order to give a sound basis for establishing the equity between capitalization and physical value, or for determining the basis of a "fair return".

**315—Intangibles.**

INTANGIBLE ASSETS OF RAILWAYS and INTANGIBLE ASSETS OF NEWSPAPERS. Editorials, *Electric Railway Journal*, September 26, 1914, p. 549.

This states that a very popular charge against railways is that that there is a great deal of water in the securities and that the extent of this inflation is represented by the difference between the par value of the securities and the value of the company's physical assets. The fact that the cost of developing a property is as legitimately a capital charge as an investment in physical property seems to some persons very difficult of comprehension. Even in official appraisals where an allowance is made for intangible assets it is often permitted grudgingly, as if it was something to which the railway was not entitled. It seems strange that this should be the case because the principle of intangible values is not one confined only to the public utility industry. It applies directly to many other lines of business, indeed to most of them, and it is recognized there as a legitimate charge against the cost of an article and as a factor in its value. In fact, if the extent to which the principle of intangible value is accepted in other lines of industry received some thought, it will be found that the percentage claimed by the railway companies for this kind of asset is usually very moderate compared with

that recognized as proper in other fields of trade. Attention is called to the fact that in the recent appraisal of the Joseph Pulitzer estate the reputations of the New York World and St. Louis Post Dispatch for news-getting (an intangible) were placed at 24 and 67 per cent. respectively. It is said that it would not be difficult to point out examples of intangible assets in other lines of business but as the newspapers are fond of criticising the inclusion of intangible assets in railway valuation and as the principle involved is not different, this example is perhaps as good a one for them as any.

## PUBLIC SERVICE REGULATION

### 222—Accounts.

DEPARTMENTS AND BUREAUS OF THE COMMISSION (NEW YORK, 1ST D): THE BUREAU OF STATISTICS AND ACCOUNTS, by DR. A. F. WEBER. *Public Service Record*, 1½ pages, September, 1914, p. 7.

A discussion of the causes out of which the bureau grew, of the uniform system of accounts, the organization of the bureau, and its work in analyzing and abstracting the regular reports of utilities, and in making special examinations of the books of companies, is given.

### 268—Public Service Laws.

COLORADO UTILITIES LAW. *Public Service Regulation*, 1¾ pages, September, 1914, p. 538.

A statement given out by the members of the new public utilities commission of the state of Colorado, is quoted at length. There is an outline of the provisions of the act—Sections 35, 36 and 37—that is, the public convenience and necessity clause, and the provisions giving the commission authority over the disposing of or incumbering of public utility property, and over stock and bond issues—will be referred to the people at the next general election.

### 231—Companies' Procedure.

PRESENTING TESTIMONY BEFORE COMMISSIONS. Editorial, *Electrical Review*, September 26, 1914, p. 603.

The importance of thoroughly preparing data for presentation to public service commissions, with especial reference to the detail with which the reports of experts should be given, is discussed. It is said that the best engineering report, certainly those which are most complete, contain enough reasoning to enable them to be checked by competent authorities. It is not necessary that every assumption or method of procedure be incorporated in a brief, but within pretty wide limits the engineer who can tell a commission how he reached his valuation or depreciation figure for every item or group of items listed in his exhibit, is thereby able to score a good many points against the man whose conclusions may be just as sound, but who cannot back them by terse, clear-cut explanations of his detailed work in field and office.

### 268—Public Service Laws.

NEW LEGISLATION OF ESPECIAL INTEREST TO GAS, ELECTRIC AND WATER COMPANIES AND MUNICIPALITIES OWNING LIGHTING PLANTS, 1914. Issued by the MASSACHUSETTS BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS. 93 pages.

On page 27 of this report is given the act whereby the city of New Bedford was given authority to require the removal of overhead wires and construction in certain streets in New Bedford. On page 89 is the act placing water companies

under the jurisdiction of the board of Gas and Electric Light Commissioners; and on page 92 the resolve to provide for certain investigations relating to the placing of the ice business under public regulation.

### **226.5—Standards of Service.**

REQUIREMENTS OF THE PUBLIC SERVICE COMMISSION COVERING METER TESTING AND VOLTAGE REGULATION, by E. H. TYSON. Read before the Pennsylvania Electric Association, at its Seventh Annual Convention, September 8-11, 1914. 13 pages.

With regard to meter testing, the writer has endeavored to interpret the rules of the commission along the lines of the best practice of today, and particularly for companies having less than ten thousand meters on their lines. With regard to voltage regulation, it is said that the Commission's rules are sufficiently reasonable in their limits and should necessitate no changes in the regulation of an up-to-date utility. Since the regulations have gone into effect, central station companies, however, have considered it good practice to keep a record of voltage on their different circuits under all conditions of load, in addition to those recorded at the stations.

### **200—Public Service Regulation.**

THE PUBLIC UTILITY AND THE PUBLIC. Pamphlet, Reprinted from the Proceedings of the 234th Meeting of the Commercial Club of Chicago, February 14, 1914.

The addresses made by Dr. Mortimer E. Cooley and Judge Thompson of the Illinois Commission at this meeting are given in detail.

Dr. Cooley discusses the present relations between the public and the utilities, the elements of value of public service companies (especially those elements little appreciated by the public) and emphasizes the necessity for education in the matter.

Judge Thompson touches upon the effort now being made to bring the managers of public service corporations and the public to a better understanding of their relations to each other. He states that arrogant indifference on the one hand and violent prejudice on the other are yielding to the indisputable fact that each is dependent on the other, and their mutuality of interest in serving and being served requires that reasonableness and fair play shall govern the conduct of both.

## **MUNICIPALITIES**

### **831.1—Municipal Bond Issues.**

NEW YORK GETS A LESSON. Editorial, *The Economist*, September 19, 1914, p. 468.

This states that the City of New York has had a big idea driven into its consciousness by the bankers who are furnishing the money to pay its debts immediately falling due. J. P. Morgan & Co. and Kuhn, Loeb & Co., heading the subscribing syndicate which furnishes \$100,000,000 enforce the condition that the city shall place itself on something like a cash basis in the transaction of its business. They require that in refunding the "corporate stock notes" provision shall be made to pay off in 15 annual installments and that no new debts shall be incurred to refund the notes. These installments must be paid out of taxes. Also they demand that improvements authorized during 1915 which will not be self sustaining shall be paid for 25 per cent from the taxes and 75 per cent in 1 to 15 years. In other ways these bankers have insisted that the "pay as you go" plan shall be followed. It is well for the city and fortunate for the country that New York has at last been brought to a sense of its own sins and the menace of those sins to the country. For many years complaint has been made of the enormous

debt of the metropolis, which approximates the debt of the federal government, and of the seeming indisposition of its financial department to change its extravagant policies. Every year New York has come out with a new offering of bonds, and a big one, and at increasing rates of interest, till there was a natural fear that the structure would topple over. A crisis for New York would be a crisis for the country, and the thanks of the American people are due to these bankers for putting a check on this great municipal speculator.

### 810—Municipal or Local Regulation of Utilities.

BILL No. 3086. ORDINANCE No. 2813. (NEW SERIES). Fixing the Maximum Rate and Price to Be Charged for Furnishing Electricity for Heat, Light or Power Purposes to the CITY AND COUNTY OF SAN FRANCISCO, and the Inhabitants Thereof, and Prescribing the Quality of the Service, for the Year Commencing July 1, 1914, and ending June 30, 1915.

The following is a statement of the rates contained in the new ordinance recently accepted by the company:

#### 720—Rate Schedules.

##### RATE.

7	cents per kilowatt-hour for the first	50 kilowatt-hours consumed per month.
6	" " " " next	50 " " " "
5½	" " " " " 100	" " " "
5	" " " " " 100	" " " "
4	" " " " " 200	" " " "
3½	" " " " all in excess of 500	" " " "

##### MINIMUM CHARGE.

#### Lighting.

75 cents per month per meter.

#### Power.

75 cents per month per horse power installed.

##### STAND-BY SERVICE.

In the event that a stand-by service only is required for lighting, a charge of \$1.00 per month may be made for each kilowatt or fraction of a kilowatt of connected load. In arriving at the kilowatt rating, each outlet shall be considered as consuming 50 watts.

### 890—Municipal Statistics.

THE COST OF MUNICIPAL GOVERNMENT IN MASSACHUSETTS: SIXTH ANNUAL REPORT ON THE STATISTICS OF MUNICIPAL FINANCES. Public Document, No. 79, 257 pages.

The statistics of municipal finances for city and town fiscal years ending between November 30, 1911, and March 15, 1912, are given as required by Section 6, chapter 371, acts of 1909 of Massachusetts. In discussing the tables on "Payments for Maintenance and Interest" the report says: "In comparing certain departmental expenses, large differences will occasionally be noted for the same class of services, the reason for which is not sufficiently apparent to warrant our attempting to assign it without more or less exhaustive inquiry. Meanwhile the differences, even for a single year, which may be noted in these comparative tables for cities of approximately the same size should stimulate local discussion for the purpose of ascertaining whether a satisfactory explanation can be found."

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**830—Public Ownership.**

WHAT IS THE EFFECT? Editorial, *Journal of Electricity, Power and Gas*, September 12, 1914, p. 254.

The fairness of the action of the city of Alameda, California, in opening a municipal store for the sale of goods such as lamps, heating devices and current consuming apparatus, is questioned. It is pointed out that when such a store sells at cost, citizens and taxpayers whose sole and only business was and is the sale and installation of such articles and who pay a license for the privilege are driven out of business. Attention is further drawn to the fact that the cost of running the establishment is distributed among all the taxpayers instead of the users of the service. It is suggested that a little co-operation between the municipal plant and the electrical dealers of Alameda would result in adding more consumers and consuming devices to their lines in three months than the municipal store selling at cost will in one year.

**830—Public Ownership.**

ANOTHER MUNICIPAL ELECTRIC PLANT SUPPLYING LIGHTING CURRENT AT 3 CENTS PER KW.-HR., by R. A. SARA. Article and Editorial, *Engineering News*, September 24, 1914, p. 655 and page 651.

Details are given of the Winnipeg municipal plant which, since October, 1911, has been selling electric current in Winnipeg at a maximum net rate of 3 cents per kilowatt-hour. The schedule of rates is given. It is said that the plant was operated at a loss during the first year and a half because during that period the business connected up was not sufficient, at the rates prevailing to pay all charges although 21,724 meters were connected in that time. The present low rates were made at the commencement of operation as it was realized that the lower the rates, consistent with cost, the quicker the load would be secured. It is said to be safe to say that the deficit will be entirely repaid out of profits early in 1915.

**840—Municipal Operation.**

MUNICIPAL OPERATION VERSUS COMMISSION REGULATION. Editorial, *Electrical World*, September 19, 1914, p. 551.

The underlying elements which spell success under private operation are lacking when the utility is operated by the municipality. Reference is here made to the belief on the part of the employees that their promotion in the company depends upon merit and not political influence, and the knowledge on the part of the manager that his success in life is inseparably associated with the success of the utility in meeting the needs of the public. The claim that the city must own and operate the lighting plant as it does the waterworks in order to obtain proper service for the citizens has little weight anywhere, and none at all in states in which the utilities are controlled by commissions. What the public want is adequate and satisfactory service at reasonable rates, which result can be insured by proper commission regulation. Numerous examples can be cited to show that with privately operated utilities suitably regulated the result is much more satisfactory than with municipally operated utilities either with or without regulation. When the service is unsatisfactory or the rates too high the fault lies in the controlling commissions. The remedy is to be found in improved regulation and not in municipal operation.

**890—Municipal Statistics.**

FINANCIAL STATISTICS OF CITIES HAVING A POPULATION OF OVER 30,000, 1913. BULLETIN 126 OF THE BUREAU OF THE CENSUS. 73 pages.

This is a bulletin containing in abridged form financial statistics of cities having an estimated population of over 30,000 on July 1, 1913. Statistical tables show the assessed valuation of taxed property, the receipts and payments of the municipal governments, and their indebtedness and assets.

## COURT DECISION REFERENCES.

### 224—Rate Regulation.

BELLAMY et al. v. MISSOURI & N. A. R. Co. Decision of the CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT. April 24, 1914. 215 Federal 18.

The order of the Arkansas Railway Commission fixing a two cent per mile passenger rate is enjoined as confiscatory. The court holds that where a railroad company incorporated under the laws of a state has built and economically operates its line of road, it is entitled to earn at least sufficient to pay operating expenses, and a law of the state which will not permit it to do so is confiscatory.

### 224—Rate Regulation.

BYINGTON et al. v. CHICAGO R. I. & P. R. Co. et al. Decision of the SUPREME COURT OF NEBRASKA. July 11, 1914. 148 Northwestern 520.

This decision holds that evidence that rates charged by a railroad company for shipments to a particular point are higher than rates charged between the initial points and two other points will not of itself support a finding and order reducing and readjusting the rates. It must be alleged and provided that the rates complained of are unreasonable, unjust or discriminatory.

### 831.1—Municipal Bond Issues.

HAYDEN v. TOWN OF AURORA. Decision of the SUPREME COURT OF COLORADO. June 1, 1914. 142 Pacific 183.

The Town of Aurora, Colorado, sought to defeat \$150,000 of water works bonds now in the hands of bona fide purchasers, on the ground that the ordinance pursuant to which the bonds were issued was not published. The court holds that in view of the recitals in the ordinance, the ordinance books and the bonds themselves the municipality is estopped from thus attacking their validity.

"It would be a strange situation if the town and its general officers, having full power and authority to comply with precedent conditions, and to determine and declare when that had been done, could issue bonds of apparent legality with recital and certificate of full compliance with all preliminary requirements, dispose of them to bona fide purchasers for value, and then defeat the bonds thus held by denying that the things which they could have done, and which it was their duty to do, in order to make the bonds valid, had in fact been totally disregarded. Such a doctrine is not only inequitable, but positively immoral. It would place a premium on misrepresentation and deceit, and at the same time cast a cloud upon securities of this class, rendering a sale of them most difficult which if accomplished at all could be done only upon terms most favorable to the purchaser."

### 115—Use of Public Highways.

DOLTON v. PUBLIC SERVICE ELECTRIC CO. Decision of the COURT OF CHANCERY OF NEW JERSEY. July 10, 1914. 91 Atlantic 589.

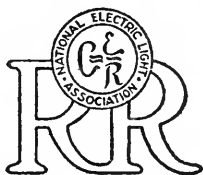
The electric company, being under contract to furnish the township with energy for street lighting, erected massive poles whereon it strung not only wires for private and public lighting but also the wires of a high-tension transmission system. The Court holds, as it did in *Thropp v. Public Service Electric Co.* (See 5 RATE RESEARCH 351) that the company had no right to erect poles larger than were necessary for the public and private lighting without the permission of the abutting property owners, and that the erection of massive poles for the high-tension transmission purposes, is trespass.

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October 8, 1914

No. 2

# RATE RESEARCH



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**RATE RESEARCH COMMITTEE**  
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120 WEST ADAMS STREET - CHICAGO, ILL.

# Rate Research

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	CONTENTS	Page
	COMMISSION DECISIONS.....	19
Wisconsin .....		19
	STANDARDS OF SERVICE .....	23
Washington.....		23
Illinois .....		23
	COURT DECISIONS.....	25
Colorado .....		25
	REFERENCES .....	28
Rates .....		28
Investment and Return.....		28
Public Service Regulation.....		29
Municipalities.....		31
General.....		31
Court Decision References .....		32



# Rate Research

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Vol. 6

CHICAGO, OCTOBER 8, 1914

No. 2

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### WISCONSIN

#### 300—Investment and Return.

JONES et al. v. BERLIN PUBLIC SERVICE COMPANY, Asking for the Establishment of Reasonable Rates for Electric, Gas and Heating Service in Berlin (pop. 4,636). Decision of the WISCONSIN RAILROAD COMMISSION, Adjusting Rates. September 12, 1914.

A valuation was made of the entire property, and the rates, rules and regulations of the three departments of the utility, gas, electric and heating were investigated. It was found necessary to prescribe new rates in all departments in order to eliminate discriminations between the departments and between different classes of service.

"The petitioners assert that the capacity of the respondent's equipment is sufficient to supply a city having a population of 10,000. While it is not definitely said so, the intimation appears to be that the capacity is much too large for Berlin and that the fixed charges upon the entire investment would unduly burden the customers if the rates should be based upon the entire amount.

"Investigation of the facts does not disclose that the capacity is in excess of the amount which is required. The capacity of the electric plant is indeed much larger than is usually required for the ordinary lighting and power service of a city of this size. The reason for this is that the company has three, or at least two, customers with unusually large power installations. There are a feed mill with 50 horse power capacity, a flour mill with 225 horse power, and a quarry with 215 horse power. The consequence is that the capacity required to take care of the power business during the day time exceeds very much the capacity required at night . . . "

#### 450—Value of Service.

"An unusual situation exists at Berlin, for the daily peak ordinarily occurs, about 11 A.M., due to the two large power consumers, the Wisconsin Granite Company and the Wright Mills. The fact that the maximum daily demand arises from the high power load and comes during the forenoon creates a situation which is unusual to deal with in apportioning the expenses of operation among the several

classes of service. Ordinarily, the peak of the electric load is caused by the lighting business or, at any rate, the lighting so overlaps and adds to the declining power load that the crest must be met during hours of darkness. In such cases as that, utilities are able to furnish considerable power service without adding greatly to the investment required for lighting alone. In apportioning the expenses of the joint operation for light and power, lighting service benefits from the economy arising from the complimentary or double use of equipment, but power service receives the greater advantage because it is essentially off-peak.

"In the case of the respondent's business, the situation is quite different for it is evident that even though no lighting were used during the time of the peak on the plant, the capacity required for power service would be four times the capacity for lighting. If the expenses were apportioned in the ordinary manner, commercial power would be overloaded with fixed costs as well as certain variable expenses, while commercial lighting and municipal street lighting which are furnished off-peak would be so relieved that their rates would be very much lower than if the respondent furnished no power or only the normal proportion of power. Since the major part of power business could not be retained with rates conforming to such an apportionment of expenses, and the lighting business could not carry the investment alone, it seems advisable to predicate the rates upon the normal expenses of the several classes of service, bearing in mind the total expenses of the business and the total revenues reasonably required . . . "

#### 650—Discrimination.

"Although the Commission has no present knowledge of the practice now followed by the company in charging its employes for electric service, there is found in the schedules on file with the Commission, the following preferential rate: Employes of company, 50 per cent of regular meter rate. This practice is in violation of the Public Utilities Law and should be corrected at once if it is being indulged in by the company . . . "

#### 720—Rate Schedules.

The rates provided for electric service are as follows:

#### COMMERCIAL LIGHTING.

##### Rate.

- { 13 cents net or 14 cents gross per kilowatt-hour for the first 40 kilowatt-hours or less used per kilowatt of active connected load per month.
- { 10 cents net or 11 cents gross per kilowatt-hour for the next 60 kilowatt hours, or portion thereof, used per kilowatt of active connected load per month.
- { 7 cents net or 8 cents gross per kilowatt-hour for all use in excess of 100 hours per month per kilowatt of active connected load.

#### Determination of Active Connected Load.

The following percentages of connected lighting load shall be deemed active:

Class A.—Residences, dwelling flats, private rooming houses, etc.; 75% of the first 500 watts connected and 50% of all installation in excess of 500 watts.

Class B.—Banks, offices, stores, etc.; 75% of the first 2.5 kilowatts connected and 60% of all installation in excess of 2.5 kilowatts connected.

Class C.—Public buildings, public and parochial schools, churches, etc.; 55% of the total connected load.

The first 600 watts capacity of each incidental appliance, such as flat irons, fans, toasters and percolators, connected to the lighting meter shall not be considered in determining the active load.

#### **Prompt Payment Discount.**

The difference between gross and net rates shall constitute a discount for prompt payment.

#### **Minimum Charge.**

\$1.10 gross or \$1.00 net per month.

#### **Terms and Conditions.**

The charges for reconnection of service for the same consumer on the same premises shall be \$1.00.

The Company shall, upon request of the consumer, inspect the installation of lamps and advise the consumer of the efficiency thereof.

### **COMMERCIAL POWER.**

#### **Rate.**

##### **Demand Charge.**

50 cents per month per active horsepower connected plus an

##### **Energy Charge of**

8 cents net or 9 cents gross for the first 50 kilowatt-hours used per month.

7 cents net or 8 cents gross for the next 50 kilowatt-hours used per month.

6 cents net or 7 cents gross for the next 100 kilowatt-hours used per month.

5 cents net or 6 cents gross for the next 100 kilowatt-hours used per month.

4 cents net or 5 cents gross for the next 500 kilowatt-hours used per month.

2 cents net or 3 cents gross for all use in excess of 800 kilowatt-hours per month.

#### **Maximum Limiting Rate for Power.**

In all cases where the average monthly net rate per kilowatt-hour for power shall exceed 9½ cents per kilowatt-hour, a flat rate of 9½ cents net or 10 cents gross per kilowatt-hour shall prevail, excepting always that no bill shall be rendered for less than the minimum bill.

#### **Determination of Active Connected Load.**

The following percentages of actual connected power load shall be deemed active:

First 10 H. P. connected, 90% active.

Next 10 H. P. connected, 80% active.

Next 30 H. P. connected, 70% active.

#### **Prompt Payment Discount.**

The difference between gross and net rates shall constitute a discount for prompt payment:

#### **Minimum Charge.**

\$1.00 net or \$1.10 gross per month.

**Terms and Conditions.**

The charge for reconnection of service for the same consumer on the same premises shall be \$1.00.

**SPECIAL CONTRACTS.**

The terms and conditions of all special contracts for installations of 50 H. P. or over shall be submitted to the Commission for approval.

The following special contract rates were left unchanged:

Stillman, Writing & Company, 2 cents per kilowatt-hour.

Wisconsin Granite Company, meter rate \$0.02954 per kilowatt-hour.

Wisconsin Granite Company, meter rate \$0.02½ per kilowatt-hour.

In regard to the company's special contract rates, the Commission says:

"C. S. Morris, the Wisconsin Granite Company and the Wright Mills are at present purchasing current for power under special contracts. The rates at which these consumers are charged are not the same as the rates of the regular schedule, but since the service is not similar to that of other users it cannot be concluded on that ground that the rates are unjustly discriminatory. It appears inadvisable to change the rates under these contracts at this time because of possible disturbance of the whole business. The contracts will be at all times under the supervision of the Commission . . . ."

**STREET LIGHTING.**

\$35.00 per lamp per year for 4 ampere, 85 volt, a. c. series enclosed arcs burning 2,500 hours per annum every night from dusk to 12 p. m., 55 lamps connected.

\$35.00 per lamp per year for 200 watt, 4 ampere, a. c. series Tungsten lamps burning 2,500 hours per annum every night from dusk to 12 p. m. 22 lamps connected.

**Corinthian Street Lighting System.**

The rate for this metered service shall be 6½ cents per kilowatt-hour under the existing conditions as to time, wattage of lamps, etc.

**782.5—Lamp Efficiency.**

"The petitioners have requested that the Company be required to inspect the incandescent lamps in use at stated intervals. The rules of service which the Commission has formulated do not require such a periodic inspection, but do require that "each utility shall specifically inform each of its consumers as to the conditions under which efficient service may be secured from its system and render its consumers reasonable assistance in securing incandescent lamps and other appliances best adopted to the service furnished." (Rule 27, In re Standards for Gas and Electric Service, 12 W. R. C. R. 2.)

It has been found in many instances that consumers object to the inspection of their installations as an unnecessary interference by the company. The present rule is designed to secure lamp inspection service for the consumers who desire it without making an inspection of all installations compulsory. It therefore appears reasonable that the company should add to its rules and regulations a rule to the effect that, upon the request of any consumer, an inspection of the incandescent lamps will be made for the purpose of ascertaining their state of efficiency . . . ."

**226.5—                      STANDARDS OF SERVICE****WASHINGTON**

An Act Relating to *Electrical Construction* and the Maintenance and Use of Electric Wires, Apparatus and Appliances (Chapter 130, Laws of 1913), with Rules as Amended, Altered, Changed and Supplemented by the *Public Service Commission of Washington*, by Order of August 14, 1914, has been issued in pamphlet form.

**ILLINOIS**

RULES ESTABLISHING STANDARDS OF SERVICE FOR GAS AND ELECTRIC UTILITIES, Adopted by the ILLINOIS PUBLIC UTILITIES COMMISSION and effective, November 1, 1914.

The rules for electric utilities relating to meter accuracy specifies the equipment to be owned by the utility for the testing of electric meters and states the manner in which the various tests are to be made. Companies having more than 1,000 meters in service are required to possess secondary standards of some approved type. The Wisconsin and other commissions have made such a rule applying to companies having 250 customers. Upon installation, electric meters are to have an average error not over 2% and the allowable error for watt-hour meter in service is 4%.

The rule covering the periodic testing of meters is here quoted in full.

“Each watt-hour meter shall be tested according to the following schedule while connected in its permanent position in place of service:

“(a) Two and three wire commutating type and mercury type meters, up to and including fifty (50) amperes rated capacity of meter element, shall be tested at least once every eighteen (18) months.

“(b) Two and three commutating type and mercury type meters of over fifty (50) amperes rated capacity of meter element, shall be tested at least once every twelve (12) months.

“(c) Two and three wire single phase induction type meters up to and including twenty-five (25) amperes rated capacity of meter element, shall be tested at least once every thirty (30) months.

“(d) Two and three wire single phase induction type meters of over twenty-five (25) amperes rated capacity of meter element, shall be tested at least once every twenty-four (24) months.

“(e) Self-contained polyphase meters up to and including fifty (50) kw. rated capacity, shall be tested at least once every eighteen (18) months.

“(f) Self-contained polyphase meters of over fifty (50) kw. rated capacity shall be tested at least once every twelve (12) months.

“(g) Polyphase meters connected through current transformers or current and potential transformers, to circuits up to and including fifty (50) kw. rated capacity, shall be tested at least once every twenty-four (24) months.

“(h) Polyphase meters connected through current transformers or current and potential transformers, to circuit of over fifty (50) kw. rated capacity, shall be tested at least once every eighteen (18) months.”

If on a test by the utility or the commission the meter is found to have a percentage of error greater than that allowed by the commission, adjustments are to be made in the bills for the six months previous, corresponding to the percentage of error of the meter.

Other rules apply to voltage variation, voltage surveys and records, and standard frequency for alternating current service.

All new construction of electric companies are to comply with the rules in the current edition of the National Electrical Code in the manner of grounding of secondaries, and existing construction is to be changed as expeditiously as possible to conform to these rules.

#### **226.2—Extension of Service.**

The regulations for both gas and electric companies contain rules regarding the extension of service. The rules covering the extension of the lines of electric utilities are as follows:

“(a) **FREE EXTENSIONS.** Each utility shall upon written request for service by a prospective consumer or a group of prospective consumers located in the same neighborhood make free of charge a line extension necessary to give service and furnish free connection, provided that such line extension does not require more than twice as many poles at standard spacing as there are individual applicants.

“(b) **EXTENSIONS ABOVE FREE LIMIT.** If the line extension required in order to furnish service at any point within the corporate limits of any city or village, or any adjacent suburb of a city or village is greater than the free extension specified above, such an extension shall be made under the following conditions: The utility may require a deposit of the cost of extension above the free limit and shall, in such case, refund an amount equal to the cost of the free main extension for each additional consumer whose service shall be taken off of the entire extension within a period of ten years from the making of such an extension, but at no time shall the rebate made exceed the original deposit. If the extension is of such length and the prospective business which may be developed by it is so meager as to make it doubtful whether the business from the extension would ever pay a fair return on the investment, the fact shall be reported to the commission for investigation and determination as to the reasonableness of such extension.

"This rule shall not be construed as prohibiting any utility from making free extension of lengths greater than above specified, or from providing a method of return of deposits for extensions more favorable to consumers so long as no discrimination is practiced between consumers whose service requirements are similar.

"(c) **CONTRACT FOR SERVICE.** Utilities will not be required to make line extensions as described in this rule unless those to be served by such extension shall contract to use the service for at least one year."

## **COURT DECISIONS**

### **COLORADO**

#### **224.5—Rates Fixed by Contract.**

**WOLVERTON V. MOUNTAIN STATES TELEPHONE & TELEGRAPH CO.** Suit to Compel the Company to Continue Residence Service Used for Business Purposes at a Contracted Rate. Decision of the SUPREME COURT OF COLORADO, Holding that the Customer Should Pay for Business Service and that Rates Fixed by Contract Are Subject to Legislative Regulation. July 8, 1914. 142 Pacific 165.

The customer conducted an insurance business at his home, using a telephone for which he paid a residence rate, according to contract. He moved to a new residence, and applied for the installation of a telephone under the old contract. The Company refused, and the customer brought suit for damages, urging that his business was being injured and that the company was obligated under the contract to furnish the service applied for. The court holds that the customer should be served under the business instead of the residence rate, and discusses at length the question of legislative power over such contracts.

#### **120—Protection of the Public.**

"Telephone companies are public service corporations, and their instruments and apparatus are therefore devoted to a public use, and by reason of various valuable rights and franchises granted by the public are subject to certain well understood duties and obligations, without discrimination, to the public generally, and are bound to conduct their business in a manner conducive to the public benefit. They are likewise subject to legislative regulation and control. These companies may not arbitrarily refuse their facilities to any person desiring them and offering to comply with their regulations, subject to the provision that rates and regulations must be reasonable."

#### **600—Rate Differentials.**

"That there is reasonably a difference in the value of such services, as between business and residence purposes, and that such difference in rates charged by such public service companies is common and

usual, is well understood. So that in this case even if we were to hold the contract binding for continued use as a residence phone, it cannot apply in case of use for business purposes, which appears to be the clear demand of the plaintiff."

#### 224.5—Rates Fixed by Contract.

"The complaint does not allege public regulation as to rates nor a customary rate charged for the service demanded, nor what is a reasonable rate therefor, nor a tender of any such sum. The right of the plaintiff, as a resident of the city of Boulder, to have a telephone installed in his home or place of business, and to the use thereof, is not dependent upon the contract, but upon the fact that the defendant is a public service corporation, with its attendant obligations to the public by reason thereof, and the plaintiff's willingness to pay the reasonable rates for such service, and to otherwise comply with the defendant's reasonable regulations, applicable to all alike, and without discrimination.

"But it must be conceded that the plaintiff could at any time have terminated the contract, under its own terms, at will. There is no agreement that the contract will continue for any definite period.

"It requires no argument to show that such contracts with public service corporations for fixed periods are impracticable, if not impossible, from their very nature. The service is a public service, and subject to a constant change of conditions.

"It is clear that, if the telephone company should reduce its rates for service to the public generally, it could not continue to hold the plaintiff indefinitely, under a contract for a higher rate.

"The rule as to the enforcement of contracts wanting in mutuality was stated by Judge Cooley in *Rust v. Conrad*, 47 Michigan 449, 11 N. W. 265, 41 Am. Rep. 720, to be:

" 'But the court will also refuse to interfere in any case where, if it were to do so, one of the parties might nullify its action through the exercise of a discretion which the contract or the law invests him with. The refusal in such a case does not depend of necessity upon any illegality, inequality, or fairness, but is sufficiently based upon the impropriety of imposing on the judge the labor, and on the public the expense, of an investigation of disputes when the circumstances are such as to preclude any judgment that may be rendered from being final. No court can with reason be called upon to do a vain thing \* \* \* \* All contracts where the party has reserved to himself, or where the law gives him the authority to render nugatory any decree that ought to be rendered in their enforcement rests upon the same principle. This was recognized in *Rutland Marble Co. v. Ripley*, 10 Wall. 339, 359 (19 L. Ed. 955) and more distinctly asserted and decided in *Express Co. v. Railroad Co.* 99 U. S. 191, 25 L. Ed. 319. In this last case the very strong assertion is made that a court of equity never interferes where the power of revocation exists.'



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"As to the application of this rule in case of contracts with public utilities for service, see *Fowler Utilities Co. v. Gray*, 168 Ind. 1, 79 N. E. 897, 7 L. R. A. (N. S.) 726, 120 Am. St. Rep. 344.

"Wyman on Public Service Corporations well states the reason for the rule of nonenforcement of such contracts with public service corporations as follows:

" 'A troublesome problem arises when the continuing to render service at certain rates fixed by a contract which was legal when it was made comes into conflict with new rates later scheduled by which the public generally are called upon to pay higher rates. It once seems to have been thought that a continuing contract to take shipment must be respected when rates generally are raised. In those days it will be remembered any concessions for which anything could be said was held justifiable. But of late, with the stringent law against all discrimination and the insistent enforcement of it, even a definite contract still continuing by its terms is held no justification for giving to the particular customer lower rates than to those called for from all by the present schedule. Once the policy against discrimination is well established, there is no difficulty in saying that for reason of public policy no further obligation attaches to such a contract. To the argument that the contract may have been valid when made if it fixed the rate then charged all, and that therefore, the subsequent action of the railroad in advancing rates generally could not invalidate it, the United States Supreme Court replied recently: "This contention loses sight of the central and controlling purposes of the law, which is to require shippers to be treated alike, and that the filed and published rate shall be equally known by and available to every shipper." ' "

"And it is now held that even in case of such contracts with public utilities for specific rates, and for definite periods of time, these are subject to legislative acts of regulation. *Louisville & Nashville Ry. v. Mottley* 219 U. S. 467, 31 Sup. Ct. 265, 55 L. Ed. 297, 34 L. R. A. (N. S.) 671; *Southern Wire Co. v. St. Louis Bridge & T. Co.* 38 Mo. App. 191.

"In addition to what has been said, it has been held that such a judgment as is prayed for in this case would be in effect the fixing of a rate by the court. *Nebraska Tel. Co. v. State*, 55 Neb. 627, 76 N. W. 171, 45 L. R. A. 113.

"It is universally held that the power to fix a rate of regulation in such case is exclusively a legislative function and that the courts may determine the question of reasonableness alone.

"It is quite clear in this case that the court is asked to perpetuate a contract between the parties as it relates to a rate once agreed on, for residence purposes, and also to make it apply to a business purpose, and which may or may not be at this time reasonable. Courts have no such power, *Colorado Tel. Co. v. Willmore*, 53 Colo. 591, 129 Pac. 204."

## REFERENCES

### RATES

#### 612.4—Distribution Economies.

LONDON COUNTY COUNCIL. REPORT OF THE SPECIAL COMMITTEE ON LONDON ELECTRICITY SUPPLY. 8 pages.

This is the report of the Council on the Merz-McClellan report on London electricity supply. The Council report was referred to in 5 RATE RESEARCH 334 and 350.

## INVESTMENT AND RETURN

#### 360—Depreciation.

IN RATE FIXING BY COMMISSION SHOULD "DEPRECIATION" BE DEDUCTED FROM PLANT VALUATION? by ALEXANDER C. HUMPHREYS. Abstract of a Paper to be Read before the American Gas Institute, October 21-23, 1914. *Gas Institute News*, 4 pages, October 1914, p. 446.

In discussing the question of depreciation, a distinction should be made between actual depreciation, to be determined only by the best judgment of an engineer competent as constructor and operator, and estimated or theoretical depreciation, which is primarily a question in accountancy and employed in connection with the annual charge to "Depreciation Reserve," but which for accuracy requires the co-operation of the engineer. In preparing a reliable estimate, the expected life of each of the several parts of the plant must be assumed, bearing in mind the original design, material and workmanship, operating methods, accountancy methods, state of the art and possible demands for product or service. These stipulations indicate the chance for error, particularly as the future cannot be controlled as to operating and accountancy methods to be employed. Provided that this estimate is to be used only to determine how much shall be retained each year from income and charged to the year's "Loss and Gain Account," there is no irreparable harm done if the estimate is not quite accurate provided a sufficient amount has been charged, as a correction can be introduced. If, however, this estimated "Depreciation" is to be the basis for deducting from the valuation of a public service property, *which should not be the case*, accuracy is of the utmost importance. Mr. Alvord's suggestion that "depreciation" should be deducted unless a sinking fund is actually kept in a bank or in trust as part of the property, when this should receive the same rate of return as the remainder of the useful property, and various recommendations made by the Committee of the American Society of Civil Engineers, are discussed. The writer enters an earnest protest against the use of tables of average lives for the several types and parts of the plant, and against considering depreciated value as a basis for rate making. The importance of the personnel of commissions is emphasized.

#### 300—Investment and Return.

PROBLEMS BEFORE COMMISSIONS, by THOMAS C. DUNCAN. Abstract of an Address before the Indiana Electric Light Association, September 23-24, 1914. *Electrical Review*,  $\frac{1}{2}$  page, October 3, 1914, p. 672; *Electrical World*,  $\frac{1}{4}$  page, October 3, 1914, p. 652.

Various problems coming before commissions are considered. It is said that going value is such a difficult subject, not so much because of lack of agreement as to what general items that it should include, but on account of the difference of personal opinion as to just how much must be included in each item. Respecting

this and other utility questions that come up before commissions, the courts must be the final arbitrators. Although they have passed on various features of the going-value question, they have not yet passed on it comprehensively as a complete issue. It is impossible to fix the going value of a utility without taking account of its complete history. If the utility has already had a fair return on the average (that is, say if it had at first had less and later more than a fair return) there is no further need of considering going value, since there is none to be taken into account. Therefore, in each case it is necessary to go over the records minutely. Commissions are not organized for driving utilities out of business, nor can they, on the other hand, permit them to loot the public. The rates established must be fair to both utility and public.

### 315.1—Going Value.

VALUATION FOR RATE-MAKING PURPOSES, by HALFORD ERICKSON. Abstract of an Address before the Indiana Electric Light Association, September 23-24, 1914. *Electrical Review*,  $\frac{1}{2}$  page, October 3, 1914, p. 672; *Electrical World*,  $\frac{1}{4}$  page, October 3, 1914, p. 651.

Mr. Erickson limited his discussion to "going value" which he defined as the sacrifice borne by an enterpriser in constructing or building up a successful business. Among the sacrificial charges which must be borne are discount on bonds acquired in getting capital for plants. These charges are in the nature of interest charges and must be considered in appraisal. A few per cent must often be allowed for organization, legal expenses and the like in appraising utilities, but where lawsuits have been numerous and of long duration this account may grow beyond a few per cent and should be taken into consideration by every fair appraiser. Going value should not be allowed when found but should be accurately determined in each case, the amount of going value to be allowed being based upon the development charges borne during the unenumerative period. The going value should be charged to the capital account as it is in the nature of an investment. How much going value should be allowed is a question of judgment to be fixed after a thorough investigation by an honest and competent regulating body.

## PUBLIC SERVICE REGULATION

### 261—Public Service Bills.

UTILITIES COMMISSION FOR UTAH. *Public Service*,  $\frac{1}{8}$  page, October 1914, p. 122.

The action taken in Utah in favor of commission regulation is discussed. Planks favoring the creation of a public utilities commission were included in the platforms of the Democratic and Progressive parties which recently held their state conventions in Salt Lake City. The two parties have fused in Utah, naming a ticket including half Democrats and half members of the Progressive party. Both conventions unanimously adopted the public utilities plank and the two parties promise that if the combined ticket is elected in Utah next fall a public utilities commission will be created. The question of the creation of a public utilities commission has been considered by the Utah Legislature several times, but bills providing for a commission have always been killed.

### 268—Public Service Laws.

MAINE UTILITIES ACT WINS. *Boston Evening News*, September 28, 1914.

The public utilities act, passed by the last Legislature, and suspended under the referendum act, so that the voters might pass upon it, was adopted by a vote of nearly two to one at the State election, according to a tabulation of unofficial returns from two thirds of the State. The tabulation showed 43,717 in favor and

25,757 opposed to the new law which, when it becomes effective, following Governor Haine's proclamation of the result of the vote, will create a commission to control all the public utilities of Maine. References to the Maine utility legislation were given in 3 RATE RESEARCH 28, 125, 271, 304, and 351.

### 132—Protection from Competition.

LETTER FROM THE EMPIRE STATE GAS AND ELECTRIC ASSOCIATION TO THE NEW YORK PUBLIC SERVICE COMMISSION, SECOND DISTRICT. August 31, 1914. 6 pages.

The letter discusses two points: (1) Should competition with an existing gas and electric company be permitted?; and (2) Should the fact that the proposed competitor is a municipality have any bearing on the previous question? A review is given of the action of various commissions in the matter, and extended quotation made from the Wisconsin Commission decision in *City of Sheboygan v. Sheboygan Railway and Electric Co.* (See 5 RATE RESEARCH 58), where the city was denied a certificate of public convenience and necessity. In discussing the question as to whether a municipality seeking a certificate of public convenience and necessity should be treated differently from a private company, the letter says: "The legislature has to a certain extent answered this question by placing municipalities on a par with private corporations in cases of this character. . . . Assuming for the moment that a municipal plant is built and operated with the same efficiency as the existing private plant and that it keeps its accounts correctly and sells its service at actual cost. Evidently this is not competition fair or unfair, it is not even 'war' as expressed by the Vermont Commission. It is practically annihilation of the existing property. The efforts and the money expended in the past are totally wasted. While steps are being taken in all parts of the country to conserve our natural resources, oftentimes at great expense, it appears illogical and prejudicial to the public welfare to compel or even permit the waste of artificial resources already created." It should be recognized that while consolidation and later increase in rates may not result and that while the users of the service might possibly benefit through lower rates, there would nevertheless be duplication and consequent economic waste which in the long run is bound to be injurious to the public as a whole.

### 261—Public Service Bills.

NORTH CAROLINA WANTS COMMISSION. *Public Service*,  $\frac{1}{8}$  page, October 1914, p. 122.

The fact that at the next session of the North Carolina Legislature an effort will be made to create another commission to look after the corporation affairs of the state and the regulation of public utilities, is noted. The present state corporation commission, composed of three members, has, it is thought, more work to do than it ought to have, and the intention of the second commission promoters is to make it the duty of either the new or old commission to look exclusively after railway matters. At present the corporation commissioners constitute the tax rate commission also. It is the purpose to relieve them of this work also.

### 242.4—Experts.

SUPERFICIAL ESTIMATES OF POWER COST. Editorial, *Electrical Review*, October 3, 1914, p. 649.

An incident in a commission case, where a reputable engineer testifying for a city made a superficial estimate in regard to power cost which was later discredited by the commission, is discussed. The tendency of reputable engineers sometimes thus to present "expert" opinions on questions a little out of their line needing thorough investigation, is decried. It is pointed out that off-hand and haphazard estimates of the wisdom of power contracts are rather uncertain proceedings in which to engage in these days of thorough study of such contracts by those who are called upon to execute them.

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## MUNICIPALITIES

### 830—Public Ownership.

BOSSE. Editorial, *Public Service*, October, 1914.

Mayor Bosse, of Evansville, Indiana, is quoted as follows, with regard to municipal ownership: "When a man works for the city he thinks he has a right to loaf on the job. He doesn't give the service he would to a private corporation. If the government owns everything the ambition of the young man is taken away. The young man dreams of building up a business, but under government ownership he doesn't have the chance. The idea nowadays is not to have competition in public utilities, but to compel the corporation to give good service at reasonable rates, with a guarantee of reasonable profit on the investment. It would not pay Evansville to levy a tax to buy a municipal plant. The people are not earning more than 2½ per cent on their investment in the water works. It would not pay Evansville to go any further into debt, if that is made possible. You could not sell bonds which would be a mortgage on the plant alone."

### 830—Public Ownership.

DAYTON BUSINESS MEN OPPOSE PROPOSED CITY PLANT. Article and Editorial, *Public Service*, October, 1914, p. 118.

The recent attempt of the Socialist party in Dayton, Ohio, to have the question of municipal ownership of the electric plant, submitted to the voters at the regular November election, is discussed. The commission, after investigation of the matter rejected the ordinance and refused to put it to a referendum vote. The Greater Dayton Association also went on record against it.

The editorial states that Dayton probably is the last city of the whole United States where an agitation for public ownership of utilities would have been expected at this time because of the immense amount of construction work which must be done, the greatness of the municipal debt, the satisfactory service and rates of the present company, and the friendly relations between the public and company.

### 830—Public Ownership.

INEFFICIENT. Editorial, *Public Service*, October, 1914.

This states that statistical experts who have been going over the last governmental report on the electric light and power industry have discovered the fact that the average selling price of the privately owned companies is but 2.54 cents per kilowatt hour, whereas the operating expense of the municipally owned plants amount to 3.14 cents per kilowatt hour. It would appear from these deductions that the privately owned plants of the country sell their product for less than it costs the municipal plants to make the same product. The average selling price of the municipal plants was 4.31 cents per kilowatt hour, or 70 per cent greater than the average selling price of the corporations. While the latter have the advantage of owning most of the larger plants, and do 95 per cent of the electrical business of the country, it would seem that public ownership, if worth anything, should be able to establish a higher comparative efficiency record than that indicated.

## GENERAL

### 980—Public Relations.

COURTING THE FAVOR OF THE PUBLIC, by PRESTON S. ARKWRIGHT. Abstract of an address before the Rotary Club of Atlanta, Georgia. *Public Service*, 2½ pages, October, 1914, p. 111.

The reasons for the street railways being easily the butt of public criticism are outlined. Family skeletons of the ordinary business houses are kept locked up in

the closet. The state possesses and exercises visitatorial powers over the street railroad company. Its records of accounts are open with and subjected to examination by governmental agencies, and are open to public inspection. It can have no secrets. Its business is transacted on a public map laid down in the city's streets before the eyes of the population. Its every fault is uncovered, its every mistake known, its every shortcoming witnessed. The bones of its skeletons bleach on the highways. There is little wonder that the street railroad does not continuously stand in the good graces of the public. It is well understood by self-seeking politicians that abusing the street railroad is apt to strike a responsive chord. The street railroad is, therefore, an ever-present, ready-to-hand, easily, and usually successfully employed, platform for the advancement of personal political ambitions. No matter that the service may be good; the very nature of the business produces causes for incurring public displeasure. It is, perhaps, well that the public is fickle. It makes of the street railroad a persistent suitor, attentively wooing the public favor with offerings of good service, low rates, governmental support, city development and considerate treatment.

### 733.1—Dewey Decimal System.

A SUGGESTED EXTENSION OF THE DEWEY DECIMAL SYSTEM OF CLASSIFICATION TO GAS ENGINEERING, by D. S. KNAUSS. Abstract of a Paper to be Read before the American Gas Institute, October 21-23, *Gas Institute News*, 4 pages, October, 1914, p. 422.

A brief review of the various extensions of the Dewey Decimal System along engineering lines, and general instructions as to the use of the extension here suggested, are given.

## COURT DECISION REFERENCES.

### 381—City Taxation.

SALT LAKE CITY V. UTAH LIGHT & RY. CO. Decision of the SUPREME COURT OF UTAH. August 10, 1914. 124 Pacific 1067.

Salt Lake City passed an ordinance providing that electric companies selling electricity on a meter basis should pay a tax of \$1.00 per meter. The court holds the ordinance to be invalid, because, since only one of the several companies selling electric energy in the city uses meters, the tax is not uniform.

### 138—Contracts.

MAYOR AND COUNSEL OF TOWN OF BOONTON V. UNITED WATER SUPPLY CO. Decision of COURT OF CHANCERY OF NEW JERSEY. July 25, 1914. 91 Atlantic 814.

Where a contract by a water company to supply water to the inhabitants of a town provides that the town might purchase the works and "at any and all times" might inspect the books and vouchers of the company, the town was entitled to exercise this right of inspection, though it did not exercise its option to purchase, nor was it a valid objection that the inspection privilege was not mutual.

"No hardship is suffered by the water company by an order for inspection as such order can be so framed as to prevent the inquisitive but disinterested person or any competitor, if there be one, from coming to knowledge of the company's affairs."

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
COMMISSION DECISIONS.....		35
Wisconsin .....		35, 41
California .....		39
Indiana.....		40
REFERENCES .....		43
Rates.....		43
Investment and Return.....		43
Public Service Regulation.....		44
Municipalities.....		45
General.....		47



# Rate Research

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Vol. 6

CHICAGO, OCTOBER 15, 1914

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## COMMISSION DECISIONS

### WISCONSIN

#### 300—Investment and Return.

Rehearing of the Case Involving the Rates of the ASHLAND WATER COMPANY. Decision of the WISCONSIN RAILROAD COMMISSION, Amending the Former Order. July 10, 1914.

The city of Ashland petitioned for a rehearing on the former order severely criticising the findings of the Commission in regard to the valuation allowed as a basis of rate making and the rate of return. It appears that the conditions in Ashland are abnormal. The city has suffered a loss in population and a general depression in business. The water works property clearly represents an abnormally large investment and value for a city of the size and conditions of Ashland. These facts were considered by the Commission and such allowances made as was deemed reasonable. The city, in its petition for rehearing, alleges that the water company should share with all other citizens the effect of the abnormal conditions; points out the losses and the low returns in other business enterprises in Ashland; contends that business hazards of Wisconsin Utilities are low and that therefore, the rate of return should be correspondingly reduced; and calls attention to the fact that government bonds yield but 2 or 3 per cent interest.

#### 340—Rate of Return.

In considering the city's contentions, the Commission says:

"Under ordinary circumstances certainly nothing less than six per cent. could be maintained to be a fair rate of return to utilities even in Wisconsin when it is usually impracticable for them to borrow the full face value of their securities at that rate. The city of Ashland itself, has, according to certain information, been paying 5 per cent. interest on most of its own bonds. City bonds, legally issued are quite generally regarded as safer investments than those of a public service company. It is considered highly improbable that the city of Ashland could have built the existing water plant without borrowing the money and paying a substantially greater rate of interest thereon than it now argues would be a fair rate for the company to earn. Public utilities, including both municipally and

privately operated, are usually built largely on borrowed capital represented by bonds. The same is true in this case and the bonds of the company bear 6 per cent interest. They were also necessarily sold at a discount. Had the city, instead of the company, built the plant, its ability to offer greater security might have enabled the city to obtain the required capital at a somewhat lower rate than private interests are required to pay. This ability to offer greater security lies in the city's power to tax all privately owned property within its borders. In issuing municipal water works bonds a city not only establishes for such bonds a first lien upon all privately owned property in that city, including public utilities, but it pledges its taxing power in so doing.

"Without establishing this first lien on all other property and without pledging its taxing power, and with only the plant itself pledged as security, it is very doubtful that the city could obtain money on terms even as favorable as those given to the private company. The city can hardly, with sound reason, claim that the water company in this case will be receiving equitable treatment if it be allowed a smaller rate of interest than the city has had to pay on its own bonds, particularly when it is remembered that the company's bonds bear interest at 6 per cent and that even at this rate they had to be sold at a discount, this being in some cases as much as 10 per cent.

"In determining the force of the arguments as to the low rates of interest obtained by investors in private business enterprises in Ashland, the matter must be viewed from the other side. The question would then be—should there still be a close relation between the rate of return to the water company and that to other private investors if the latter were obtaining several times the rate now received, say 12 to 15 per cent or more. It is very doubtful that any such rule would be admitted to work both ways. It has not been shown, or apparently even claimed that there are no private investors in Ashland who are making as much as 6 per cent or more on their investments."

#### 840—Public Operation.

"The Ashland water works is in fact so large and so well constructed that it is very doubtful whether the city, if it had owned the plant would have invested so liberally therein and would have developed the plant on so extensive a scale as the present owners. Attention is called to these facts not for the purpose of conveying the impression that the Ashland plant has excessive capacity or that it is more costly than necessary, but simply because they vitally affect the cost of the service which this plant renders. The city of Ashland is fortunate rather than otherwise in having its water works owned by parties whose financial position was such that they could be required to provide such a plant as the one it now has even though it did not earn the ordinary returns upon the investment.

"If the city owned the water works it is possible that, by pledging all of its taxable property as well as its powers of taxation, the city could have obtained the capital required for the construction of the water works at a somewhat lower rate of interest than the rate at which the capital for the present plant was obtained. It is also possible that the city in operating its own plant could keep down the executive salaries to a slightly lower figure than the salaries now paid by the existing company. When it comes to the remaining expenses that enter into the cost of the service, however, the situation in this respect is likely to be reversed. While municipal operation is more successful in the case of water works than in the case of other public utilities it is more than likely that the increase in the other operating expenses under such operation would fully offset the decrease in the fixed charges. These statements are especially true in cases where as much is demanded in way of facilities and service of municipally owned as of privately owned plants. The tendency to demand more in the way of service in the latter case, however, is in most places quite marked, and this of course has a material effect upon the expenses. If the city, in obtaining capital for the plant had pledged the property of the plant only, it is quite certain that it could not have obtained this capital at a lower cost than that for which the present owners obtained their capital."

. . .

#### **340—Rate of Return.**

The question of a proper return is discussed in conclusion as follows:

"It is a fact that as has been stated by the city's expert the operation of the public utility law in this state has had a marked tendency to reduce the risks involved in the business and hence to lower the cost at which capital can be had in the public utility field. It is also a fact that the public is given the benefit of those reductions for the allowance for interest and profits which the Commission includes in the cost of the service upon which the rates are based are for these reasons gradually growing smaller. We regret to say, however, that this downward tendency in the cost of obtaining capital for public utilities in this state is not always great enough to offset such abnormally low relative earnings as are sometimes encountered or to have caused the capital and the enterprise in this field to become so abundant that these factors can now be generally had at as low a cost as six per cent on the investment.

"The rates of return for interest and profits depend upon the risks involved, the state of the money market, the nature of the business and upon many other factors of this nature. Some idea of what capital and the enterpriser can now be had for by public utilities may be gleaned from the prices at which their securities are selling. During the past few years, for instance, good bond issues have been selling on bases upon which the cost to the company, when discounts

and selling expenses are taken into account, averages a little more than six per cent. The bonds in these cases, however, did not cover more than 50 per cent of the value of the property behind them. They were also secured by a regular net earning of the plants that amounted to about twice as much as the interest charges on the bonds. Had in these cases the bonds covered a greater proportion of the value of the plant than they did, and had the net earnings of the plant been less or more irregular than they were, then it is also certain that the bonds would have sold on bases under which the cost to the companies would have been still greater. Now if the better secured part of the capital, that which is represented by the bonds, cannot be had at a less cost than six per cent it is quite obvious that that part of the capital which is represented by the stock and which is much less well secured, commands in the long run much higher rates than six per cent. In fact the situation in this respect is such that the plants whose net earnings amount to less than about 7.5 per cent on the investment find it difficult to obtain the capital needed on reasonable terms.

‘The cost of capital and of the enterpriser are fixed by economic forces or laws in the open market. These laws cannot be controlled either by the state, the city or this Commission. Public Utilities, like everybody else, must pay the market prices for what they need. Exceptions to this are only temporary in their nature. This Commission has been made aware of this in more ways than one. For instance, where the existing rates, for services yield less than the market rate for interest and profits, the utilities often find it impossible to obtain capital for new and much needed extensions to the plant until the Commission has authorized such increases in the charges for their services that the returns are brought up to the level of the general market. In other cases again where the Commission has happened to make so great reductions in the charges for service that the returns upon the investment were brought down below the market or reasonable level, the Commission has had to retrace its steps and to raise the rates up to the requisite level before the utilities could obtain the necessary capital for such additions to the plant and to the service as were demanded and needed by the public.

“These and other facts of the kind illustrate quite fully the fact that each of the factors of production, the same as commodities and services generally, have their market prices, and that these factors the same as commodities and services generally, cannot be had in the long run unless these prices are paid. . . .

“Were the conditions involved in this case normal, the Commission would not now hesitate to allow as much in the way of earnings of the plant as would be sufficient to cover the full cost of the necessary capital and managing ability as fixed in the open market under similar conditions. Such allowances in the long run are undoubtedly

the best for all concerned for under them the supply of the factors of production becomes abundant instead of restricted and general development and prosperity is promoted rather than retarded. In fact, no city in the long run can ever hope to obtain service or the factors involved in it for less than their fair market price. But the conditions at Ashland and which surround the Ashland Water Company are, as stated, abnormal. They appear in fact to be such that both the water company and its customers for the present at least will have to forego something to which under more normal conditions they would have been entitled. For these reasons mainly we deem it just and equitable to all concerned to temporarily alter the schedule of rates established by our order of February 17th, 1914 by reducing the charge to the city for hydrant rentals from \$24,300 as named therein to \$21,000 per annum, and by temporarily reducing the so-called flat rate part of this schedule for residence and commercial users by a somewhat smaller amount, or to the rates named in the order herein."

## **CALIFORNIA**

### **300—Investment and Return.**

**SALINAS CITY V. COAST VALLEYS GAS AND ELECTRIC COMPANY,** Alleging that the Company's Rates are Excessive. Decision of the CALIFORNIA RAILROAD COMMISSION, Prescribing a New Schedule of Electric Rates. August 28, 1914.

"Defendant claims to have paid \$400,000.00 for the stock of its predecessor companies. As \$500,000.00 face value of bonds and a floating debt of \$207,000.00 were outstanding on March 18, 1912 it follows that if \$400,000.00 was actually paid for the stock of the predecessor companies, defendant paid \$1,107,000.00 for the property which, according to Mr. Jackson's analysis [Mr. Jackson is the defendant's general manager], had cost at that time not to exceed \$806,955.00 (with certain additions for interest during construction, and deductions for abandoned and replaced property during more than thirty years). This price would be \$300,000.00 in excess of the cost of the property. It must also be remembered that this price includes bond discount."

### **311.2—Reproduction Cost New.**

"Defendant acquired its property only a day or two before the effective date of the Public Utilities Act and with a full realization that its rates would be subject to public regulation, and defendant must be presumed to have known that it was entitled to a return on only a fair value of the property. In order to be absolutely fair to defendant the Commission will in this case allow the full estimated reproduction cost of the physical properties, although certain portions

thereof are already partly obsolete and will further allow an item for intangibles, although not proved. In this manner, out of liberality to the defendant the Commission will make up a material portion of the difference between the amount alleged to have been paid for the property and the real value thereof."

## INDIANA

### 300—Investment and Return.

CITY OF RICHMOND V. RICHMOND CITY WATER WORKS, Alleging that the Company's Rates are Excessive. Decision of the INDIANA PUBLIC SERVICE COMMISSION, Fixing Rates, June 20, 1914.

### 310—Valuation.

The decision contains an extensive review of the holdings of Commissions and courts as to the proper basis of valuation and the treatment of different items in making valuation for rate making purposes.

### 315.1—Going Value.

After discussing previous holdings on going value and meanings applied to this term by the New York Court of Appeals in their recent decision [5 RATE RESEARCH 19] and by various Commissions, the decision says:

"In so far as "going value" represents unrequited losses of the lean years of this plant, the splendid profits made honestly throughout its career have certainly most fully and completely eliminated it.

"In so far as the term "going value" represents the difference between the completed plant without use of its service and the same property with a full demand for its service it is very difficult to define. However, the fact, that it is difficult to define does not release us from its consideration.

"In this particular case all the labor and money expended in securing business has been paid for by the public. Whatever money was expended for labor, or for anything else, in building up the business of the water works was paid for out of money earned by the plant, and it was charged as operating expenses. The water works exacted a rate that yielded satisfactory returns on the investment, accumulated a very handsome profit, and yet left a sum sufficient to pay all operating expenses, including the money expended in developing and securing the business. As the public has once paid this entire expense we see no reason why it should be now added to capital account in the form of going value."

### 340—Rate of Return.

"The rate of return on the value of the property that is used and useful for the convenience of the public can not be determined by any formula or fixed rule. Each case must be governed by its peculiar facts, otherwise justice might not be done between the people and the utility.

"In a former part of this opinion the source of the funds invested in this property are clearly set forth. It will be observed by an examination of these facts, that about \$300,000.00 put into this property by the Water Works was derived from the revenues earned by the Company in excess of a reasonable return on the investment, fixed charges, and operating expenses. It will be further noted that there has been invested in this plant something more of the depreciation fund than has been accounted for on the books of this Company. It is admitted by the Water Works that about \$35,000.00 of the cost of the service pipes was paid for by the consumers. The entire present value of these service pipes is estimated in the property the value of which is fixed at \$750,000.00.

"A rate of return on the value of the property must be fair both to the user and to the investor. . . . If the total actual cost of this plant had been taken from the pockets of the investors, and invested in this property, it would be entitled to a higher rate of interest, or a higher return than it is entitled under the present condition.

"Viewing this property, the source from which the investments therein were derived, keeping in mind the interest of the public and keeping in mind the interest of the investors, who are the owners of this property, we are satisfied that a net return of 6% on the value of this property as hereinbefore found is sufficiently large."

## **WISCONSIN**

### **132—Protection from Competition.**

Investigation of the Extension of the Line of the GRANGE HALL FARMERS TELEPHONE COMPANY in the Town of Rock Elm, Pierce County, Wisconsin. Decision of the WISCONSIN RAILROAD COMMISSION, Requiring that Service be Discontinued. August, 1914.

The Grange Hall Farmers Telephone Company filed a notice with the Commission of a proposed extension of its line. The company stated that the extension would not interfere with any other company. When the twenty-day period fixed by the statute had elapsed, the Commission, relying upon the fact that no objection to the extension had been filed and also upon the statement of the Grange Hall Company, authorized the building of the lines. Subsequently a complaint was received from the Highland Telephone Company. The Commission made an investigation and its findings are summarized as follows:

"It appears, therefore, that the Grange Hall Farmers Telephone Company failed to comply with the law in that it did not give written notice to the Highland Telephone Company in December of its intention to construct; that it misled the Commission by stating that the proposed extension would not affect any other company, whereas, it did as a matter of fact parallel the line of the Highland

Telephone Company and take away six subscribers from that company; and that upon being notified of its failure to perfect its legal right and being instructed to file a new notice, the company filed the notice but proceeded to build the line without waiting for a hearing or a determination of the matter by the Commission. . . .

"Although the construction of the line in question was unlawful because the conditions precedent were not complied with as required by statute, the Commission's investigation has included an inquiry into the merits of the case in order to determine whether the situation is actually such as to indicate a public need for the new line. . . ."

#### **132.2—Fair Rates and Efficient Service.**

"The controlling reason for the construction of the new line in the identical territory already occupied by the Highland Telephone Company appeared at the hearing to be a matter of rates. . . .

"It has been pointed out in several decisions of this Commission that ruinous duplication of lines and service is not to be permitted merely because the rates of existing companies are thought to be excessive. The law provides an adequate remedy for excessive rates by the filing of complaints with this Commission. . . ."

#### **132.8—Unnecessary Duplication.**

"Thus, the line in question was constructed in territory in which its construction could not have been permitted if the proper legal steps had been taken. In such a situation, the Commission has no alternative but to order a discontinuance of the service given by the unlawfully constructed line, Section 1797m-74 of the Statutes says, 'No public utility already engaged in furnishing telephone service shall install or extend any telephone exchange for furnishing local service to subscribers in any municipality when there is in operation a public utility engaged in similar service without having first served notice in writing upon the Commission and any other public utility already engaged in furnishing local service to subscribers in such municipality of the installation or extension of such exchange which it proposed to make,' etc. The obvious purpose of the statute was to prevent the creation of the identical state of affairs that has arisen in this instance, namely, a wasteful duplication of telephone lines. It is the duty of the Commission to give this law effect. [Section 1797,-1-2.]" . . .

#### **243.6—Penalties.**

"The continued existence and operation of the line in question is an act for which those concerned are liable to prosecution. It is a further duty of the Commission to report to the Attorney General violations of the statute so that such prosecution may be begun."

The Company is given two weeks from the date of the decision in which to discontinue service over the line and if the service is not discontinued within that time the matter will be turned over to the Attorney General for prosecution.



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## REFERENCES

### RATES

#### 614—Heating and Cooking.

GAS VS. ELECTRICITY FOR COOKING, by R. C. POWELL. Paper Read before Twenty-Second Annual Convention, Pacific Coast Gas Association, Long Beach, California, September 15-18, 1914.

A discussion of gas versus electric cooking is given. It is said that under special conditions such as aboard ship, and where hydro-electric power is applied principally to seasonal industries, as for example, irrigation work, electricity has the field as regards gas. In small towns where gas cannot be sold for less than \$1.75 per thousand cubic feet, electricity is a competitor of gas, and a very strong one. In this, the electric man is justified in making a determined effort to increase his business by adding cooking devices, and he should succeed. In the larger communities where gas is sold for \$1.00 or less, per thousand, electricity has not, under present or prospective conditions, much chance to become a competitor of gas to any appreciable extent, for the manufacture and distribution of gas rests upon a much firmer economic basis. The electric central station should not waste any effort in attempting to compete with gas for cooking, where a reasonable gas rate prevails, because a community as a whole cannot nor will not sustain an increase in economic loss.

### INVESTMENT AND RETURN

#### 319—Land.

THE TREATMENT OF LAND IN RATE CASES, by EDWARD W. BEMIS, *National Municipal Review*, 4 pages, October, 1914, p. 741.

The holdings of courts and commissions in regard to the proper method of treating the valuation of land in rate making cases are reviewed and it is stated that the original cost of land to a public utility has not yet been given satisfactory consideration by the courts. The general tendency has been to value these lands at approximately the value of adjoining land at the time of the rate investigation, but without much, if any, allowance for so-called plottage value or for the peculiar value which the land in a given location might have for the special business of a power house or gas works. The federal supreme court in the recent Minnesota rate case has gone further in rejecting the replacement theory, as it is usually called, than hitherto. Having taken a long step away from the replacement theory, it is entirely possible that the court in future decisions will approach still nearer to the original cost of land, as the fair basis for an appraisal in a rate case. If the courts come to recognize that our public utilities are granted quasi-governmental rights, such as that of condemnation, occupancy of street, highways, etc., for a public purpose, and are in a way allowed to have these rights as a trustee for the public, then the increase in value of these lands can no more be retained by the trustee or agent than in the case of an ordinary trust. In the latter case, while entitled to a fair return on all his labor and ability, the trustee is not entitled to a rise in the value of the assets which he controls for another. It might be unwise and unjust to apply the idea fully at the present time. If, however, the matter come about gradually, so that the investing public can in a few years adjust itself to the transition, there is justice in a gradual restoration to the

community of the unearned increase of land values which has come to all public utilities. Whatever be the merits of shifting local taxes gradually from improvements to land values, there are special reasons for refusing to allow unearned increments to a monopoly which has been granted public franchise in order to supply vital social needs. If the view commonly held be correct, that the land of a gas company should be treated like ordinary land, then such a company, other things remaining the same, has the right to raise the price every time an improvement near the gas works raises the value of the land in the neighborhood. As soon as this is understood, there will be a general revolt against the present habit of most of the courts and commissions of giving full weight, in rate cases, to the enormous increase of land values since their acquisition.

### 361.5—Electrolysis.

MITIGATING ELECTROLYSIS BY THE INSULATED RETURN FEEDER SYSTEM by FRANK C. PERKINS. Paper read before the Nineteenth Annual Convention of the International Association of Municipal Electricians at Atlantic City, N. J., September 15 to 18, 1914. Pamphlet, 3½ pages.

The insulated return feeder system for preventing injury by electrolysis due to stray electric railway currents is described and illustrated by diagram, and authorities are cited stating that experience has shown that this method affords a substantial measure of protection from electrolytic action. With a view to eliminating loss from electrolysis a number of cities have recently enacted ordinances and conducted investigation. A brief report is given of the work in the city of Chicago and various other cities where investigations have been held by local experts or by the Bureau of Standards of the Department of Commerce at Washington, D. C. The Bureau of Standards has made and is making electrolysis surveys in various American cities, one of which has been recently completed in the city of Springfield, Massachusetts.

## PUBLIC SERVICE REGULATION

### 132.8—Unnecessary Duplication.

DUPPLICATION BY MUNICIPAL UTILITIES, by GEORGE A. LEE. *Journal of Electricity, Power and Gas*, 1½ pages, October 10, 1914, p. 341.

The writer, who was formerly chairman of the Washington Public Service Commission, points out the "economic absurdity of a duplication of public utilities." A number of instances in the state of Washington are cited in which a municipality has duplicated the system of a public utility company. The need of the development of the natural resources and the extension of public service power in this western community is recognized and it is pointed out that the investment of private capital can be encouraged only by the protection of such investments from needless competition. The situation in Washington is illustrated as follows: "The law forbids discrimination. It requires uniformity in rates. It imposes many other requirements. A privately owned plant might have come into the city of Spokane (say twenty-five years ago), made an investment of a million dollars, given light and power to the people, and developed eastern Washington. It might have been content to wait many years (during the so-called lean period) before it received a return upon an investment; the period passes and it is about to make a reasonable profit upon its investment; it complies with all the laws and lays its cards on the table. About that time agitation is started for municipal plants, and what is the result? The municipal plant is built and is not regulated by the same law as the privately owned plant. You must either place them on the same basis or else eliminate regulation altogether. That is bound to come

about within the next five years." A proper rate of return for public utilities is also commented upon and the writer justifies a higher rate than the banking rate, at least until the company is well established.

### **222—Accounts.**

UTILITY COST ACCOUNTING. Editorial, *Journal of Electricity, Power and Gas*, October 3, 1914, p. 324.

The uniform classification of accounts adopted by the Oregon Railroad Commission is commented upon favorably and it is urged that the National Electric Light Association take steps to further the adoption of an adequate accounting system. The usual accounting system shows the cost of equipment and operation without reference to their proportionate cost for the particular class of service being rendered. At any subsequent period it is a slow and tedious process to determine this cost of service, whereas it would be a simple matter if the apportionment were made in the regular course of records. Greater refinement is necessary in order to determine existing inefficiencies and losses. While the present tendency to base rates upon the cost of service is likely to be short-lived, it is nevertheless now followed by many rate-making bodies. The usual accounting forms do not give information that differentiates between the cost of supplying business and residence consumers, long-hour power users and spasmodic users, and sometimes does not even distinguish between the costs of hydro-electric and steam generation.

### **226.5—Standards of Service.**

STANDARD METHOD OF GAS TESTING, Circular of the Bureau of Standards, Department of Commerce, Washington, D. C., 180 pages, Issued August 1, 1914.

In answer to frequent inquiries, the Bureau of Standards has published a circular to be used as a standard guide to the methods of testing gas distributed for illuminating and heating purposes. It is intended primarily for use in official testing and in works laboratories which are checked by city and state inspectors, and contains suggestions as to location and equipment of gas-testing laboratories, a description of some of the accepted forms of apparatus, directions for the making of the various tests, and recommendations as to the interpretation of experimental results. It does not discuss the testing necessary for good works control, although a few works laboratory methods are included, which have direct bearing on the quality of the finished gas.

## **MUNICIPALITIES**

### **800—Municipalities.**

THE NEW MASSACHUSETTS LEGISLATION REGULATING MUNICIPAL INDEBTEDNESS, by CHARLES F. GETTEMY, *National Municipal Review*, 10½ pages. October, 1914, p. 682.

The new municipal indebtedness act, which took full effect on January 1, 1914, is regarded as "the most comprehensive and effective body of legislation on this subject of any state in the union." Three separate investigations of municipal indebtedness were made by the bureau of statistics. A special investigation authorized by the legislature and completed by the bureau in 1912, furnished a comprehensive presentation of the outstanding municipal indebtedness of every city and town of the commonwealth. These investigations disclosed a condition of affairs respecting the manner in which the cities and towns of the state were permitted to incur debt, which was lamentable in the extreme. The former

practice of municipalities and the correction of such conditions under the new law is discussed at length. The writer states that, "this legislation may be expected to place the municipal indebtedness of Massachusetts upon a sounder basis and more closely in accord with the best principles of municipal finance than is that of any of her sister states."

### 800—Municipalities.

THE UTILITIES BUREAU, by CLYDE LYNDON KING. *National Municipal Review*, 4½ pages, October, 1914, p. 751.

The mayors of a number of American cities, prominent among whom are Rudolph Blankenburg of Philadelphia, John Purroy Mitchel of New York, Carter H. Harrison of Chicago, George W. Shroyer of Dayton, and Newton D. Baker of Cleveland, have jointly organized a bureau to be known as the "Utilities Bureau", through which American cities may co-operate in exchanging data as to cost factors and service standards in municipal utilities. The demand for this bureau grew out of the numerous and complicated difficulties in the way of securing what seemed to be fair rates and adequate service standards in many of the cities. The average public official now, when the question is raised as to the reasonableness of rates and service standards of the utilities within his city, at once sends out a volley of letters to public officials elsewhere. The result is information inadequately supplied and a constant harassing of public officials for information of a detailed character which it is usually impossible for the official to provide. The bureau will collect these facts from authoritative sources and thus be in a position to give to any city official facts that could not possibly be secured without very heavy expense in any other way. Another purpose of this bureau is to aid the city to present its case in a controversy before state commissions involving the question of proper rates and service of a public service company.

### 800—Municipalities.

ST. LOUIS' SUCCESSFUL FIGHT FOR A MODERN CHARTER, by ROGER N. BALDWIN, *National Municipal Review*, 6 pages, October, 1914, p. 720.

An account is given of the political fight which lead up to the adoption, on June 30, of a new city charter "based on the theory of popular government and direct responsibility." The charter is favorably criticised and its various features are presented in brief. Provision is made in this charter for the municipal ownership of public utilities of any kind.

### 810—Municipal or Local Regulation of Utilities.

MUNICIPAL UTILITIES. Notes and Events. *National Municipal Review*, October, 1914, p. 772.

The Pennsylvania public service law is criticised on the ground that the law has deprived the cities of practically all effective powers over the utilities within their borders. The municipal home rule league of Pennsylvania, recently organized, has adopted a resolution protesting against certain features of the law and favoring "open and free competition in the public utility field."

### 830—Public Ownership.

STREET RAILWAY RE-SETTLEMENTS AND NEGOTIATIONS FOR MUNICIPAL OWNERSHIP, by DELOS F. WILCOX. *National Municipal Review*, 6 pages, October, 1914, p. 745.

An account is given of the progress toward municipal ownership of street railway lines in Chicago, San Francisco, Seattle, Cleveland, Kansas City (Missouri), Detroit, and other American cities.

**840—Public Operation.**

SIDELIGHTS UPON MUNICIPAL PLANT OPERATION. Editorial, *Electrical Review*, October 10, 1914, pp. 694-695.

The importance to the municipal electric plant of keeping adequate records of operation is pointed out. Operation at a loss should be known by the municipality, as increasing burdens on the tax payers will lead to a demand for expert examination of accounts. In some cases frequent changes in the administration have made it extremely difficult to secure data as to past operation of the plant. It is stated that over and over again municipalities fall into the morass of increased taxes in chasing the will-o'-the-wisp of free street lighting. The practice of making no charge for street lights while appropriations are made to cover the losses in plant operation simply means that the customers of the plant rather than the citizens, as a whole, are paying for the street lights. Where the actual cost of operation is known, it has been shown to be advantageous to the municipality to make an arrangement with a central station for the supplying of cheaper current. The problem of purchasing energy or of continuing to produce it locally is fundamentally an engineering question, the answer to which can only be drawn from specific and accurate data which it should be the pride of every operator to maintain.

**GENERAL****980—Public Relations.**

PUBLIC RELATIONS, Annual Convention Section. *Electric Railway Journal*, October 10, 1914, p. 119-736.

This special number contains an important series of contributed articles on the subject of public relations grouped under three classifications: meeting the public, operating conditions, and regulation. The following is a list of the articles published:

How the American Association is Developing Good Public Relations, by Charles N. Black.

A Concrete Publicity Suggestion, by C. Loomis Allen.

Complete Understanding Between Companies and Public Desirable, by L. S. Storrs.

The Importance of Good Public Relations, by Theodore P. Shonts.

The Good-will of the Public as a Street Railway Asset, by Jesse W. Lilienthal.

The Need for Corporate Courage, by George H. Harries.

Public Relations, by H. M. Byllesby.

Public Opinion and Business, by Guy E. Tripp.

Is Publicity a Cure-all? by A. W. Warnock.

Principles Underlying Publicity, by Ivy L. Lee.

Building up Confidence in a Public Utility, by John A. Britton.

Five Years' Development of the American Electric Railway, by Frank R. Ford.

Popularity of Electric Railway Securities, by Allen G. Hoyt.

Improving the Attitude of the Public Toward the Traction Company, by Edwin Gruhl.

Improvement of Relations Between Electric Railways and Employees, by Charles W. Eliot.

Cordiality in Public Relations, by John A. Beeler.

Interurban Transportation and the Public, by C. D. Cass.

Tramway Fares in America and Europe, by Louis Bell.

The Electric Railway and the Farmer, by John R. Graham.

Winning the Confidence of the Public, by R. M. Searle.

Aspects of Rush-hour Service, by E. C. Foster.

Engineers and Accountants as Factors in Securing Better Public Relations, by Dugald C. Jackson.

Qualifications of a Public Service Commissioner, by Alexander C. Humphreys.  
 The Partnership Provisions of the Kansas City Franchise, by Philip J. Kealy.  
 Local Versus State Regulation, by Richard McCulloch.  
 Co-operation in Transit Contracts, by Timothy S. Williams.  
 What Might Have Happened to the Talents, by L. R. Nash.  
 Public Utility Regulation—A Cloud on the Horizon, by H. H. Crowell.  
 Electrical Railroading in Utah, by Simon Bamberger.  
 Electric Railway Securities and Franchise Readjustments, by Albion E. Lang.  
 Tendencies of Public Ownership, Illustrated by Federal Experience, by William J. Clark.  
 Regulation from a Commission Viewpoint, by Walter A. Shaw.  
 The Expiring Franchise, by Calvert Towniey.  
 Co-operation and Harmony between Companies, Commissions, and Public, by Travis H. Whitney.  
 Proposed Co-operative Arrangement at Philadelphia, by A. Merritt Taylor.  
 Public Versus Private Ownership, by William D. Kerr.  
 Stock Dividends; Why and When Justified, by Philander Betts.  
 Public Utility Legislation, by Matthew S. Dudgeon.  
 Financial Relation Between Cities and Utilities, by Bion J. Arnold.  
 Commissions and the N. E. L. A., by T. C. Martin.

### 782—Efficiency.

THE MEASUREMENT OF ILLUMINATION by C. S. REDDING. Paper read before the Nineteenth Annual Convention of the International Association of Municipal Electricians, at Atlantic City, N. J., September 15 to 18, 1914. Pamphlet, 5 pages.

It has not been until recent years that sources of illumination have been placed in buildings, streets, etc., with much, if any, care as to the production of the best results. An architect, for instance, in laying out his building would place his light fixtures so that they would be in a symmetrical position, or would fit the interior decorations in a nice way, but seldom with much idea as to whether or not the illumination produced in the room would be the best for the particular purpose for which that room was intended. Similarly, in placing street lights they would be placed at intersections of streets, with perhaps one lamp between intersections, but not with any idea of securing anything like a scientific distribution of the illumination. Three things to be considered in securing ideal street illumination is the uniformity of illumination, the low intensity of the source, and the placing of the source high out of the line of vision. The intensity of illumination is important. Many cities are now specifying just what illumination shall be produced by new installations, and an instrument for measuring illumination is, therefore, necessary. The general name of illuminometer has been given to instruments designed for this purpose. Several forms of illuminometer have been placed upon the market. The paper describes and illustrates by diagram a typical instrument, the Macbeth Illuminometer.

### 788—Service Rules.

REPORT OF THE COMMITTEE ON HIGH VOLTAGE CONSTRUCTION IN CITIES, before the Nineteenth Annual Convention of the International Association of Municipal Electricians, at Atlantic City, N. J., September 15 to 18, 1914. Pamphlet, 4 pages.

The report contains rules for overhead line construction, insulation and grounding, and includes a list of references noting reports prepared by similar bodies.

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No. 4

# RATE RESEARCH



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## Rate Research

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CONTENTS	Page
<b>COMMISSION DECISIONS</b> .....	51
Ohio .....	51
California .....	56
New Jersey .....	58
<b>REFERENCES</b> .....	59
Rates .....	59
Investment and Return.....	60
Public Service Regulation.....	61
Municipalities.....	62
General .....	63



# Rate Research

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Vol. 6

CHICAGO, OCTOBER 22, 1914

No. 4

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### OHIO

#### 300—Investment and Return.

THE BUCYRUS LIGHT AND POWER COMPANY, Application for the Establishment of Just and Reasonable Rates. Decision of the OHIO PUBLIC UTILITIES COMMISSION, Fixing Rates. October 8, 1914.

The Council of the City of Bucyrus passed an ordinance prescribing rates to be charged for electric service in the city for a period of five years. The company appealed to the Commission alleging that the rates prescribed in the ordinance were unreasonable, and asking that the Commission establish a proper schedule of charges. The Commission issued an order May 15, 1914, fixing the valuation of the company's property at \$95,000, and the decision under consideration deals only with the balance of the matter. The Commission's statement on the case is here set forth practically in full.

One of the factors to be considered is the amount of service now performed by the company and the possibilities of an increase or decrease.

"The amount of service performed by the company for the year immediately preceding the filing of this case is below what might be expected in a city of approximately 10,000 thrifty people. The unavoidable agitation and uncertainty which have prevailed during the pendency of this case have prevented any material increased demand for service. It is the opinion of the Commission that the service performed by this company was not and is not more than fifty per cent of the possible service that might be, under proper rates, demanded by the people of Bucyrus."

#### 340- Rate of Return.

"It is unnecessary for the Commission to come to any conclusion at this time as to what would be a fair rate of return upon capital invested in the electric light and power business. The service now performed at the cost of production shown in this case would not produce six per cent upon the value found by the Commission. Even a reduction in operating cost by an amount equal to the difference between the operating cost of steam-driven apparatus at

Bucyrus and the operating cost of natural-gas-engine-driven apparatus as used, would not produce six per cent upon the value found by the Commission. The present plant with its peak load estimated to be but fifty per cent of what the city has a right to demand, is now running to its capacity. Whatever the rate charged for service under the present conditions, the rate of return upon the value found would not reach six per cent. It is therefore unnecessary to come to any further conclusion and unprofitable to inquire further in this case, into this widely discussed and important question."

**310—Valuation.**

"The value of the property of the Bucyrus Light and Power Company has been found by the Commission to be \$95,000. It is evident that this valuation cannot be a controlling factor for rate making, when any rate short of an increase of the old rate would be necessary to produce an adequate return thereon."

**410—Cost of Service.**

"The cost to this company of performing the service rendered can have little bearing on what is a just and reasonable rate. That the cost of service is too high must be admitted. This may be attributed to the use of gas at 28 cents per thousand, to inefficient management in the operation of the plant (this management was changed after this case was commenced), and perhaps to some other causes. Whatever the cost may have been or ought to be, it will always be relatively high as long as wrong, unscientific or high rates for service are maintained, which necessarily limit the possible use of the service."

**450—Value of Service.**

"The right of the people of the City of Bucyrus to service at a rate which shall be fair and just to them [is the controlling factor to be considered in this case].

The Supreme Court of Maine (99 Me. 379) in a case involving the rate to be charged by a water company states the Bucyrus Light and Power Company case as the Commission views it exactly:

"They are entitled to charge reasonable rates. Reasonable is a relative term, and what is reasonable depends upon many varying circumstances. An equivalent to the prevailing rate of interest might be a reasonable return, and it might not. It might be too high or might be too low. It might be reasonable, owing to peculiar hazards or difficulties in one place to receive greater returns there, than it would in another upon the same investment. Then, their reasonableness relates to both the company and the customer. Rates must be reasonable to both, and if they cannot be to both, they must be to the customer. That the amount of the investment does not control either way is decided in *San Diego Land and Town Co. v. Jasper*, 189 U. S. 439, and *Stanislaus County v. San Joaquin, etc., Co.*, 192 U. S. 201. In the former case the court said that the rule that the company is entitled to demand a fair return upon the

reasonable value of the property at the time it is being used for the public "is decided as against the contention that you are to take the actual cost of the plant, annual depreciation, etc., and to allow a fair profit on that footing over and above expenses." And in the latter, the court said, "To take the amount actually invested into 'estimation' does not mean necessarily that such amount is to control the decision of the question of rates." So that while it is strictly true that the company is entitled to more than a reasonable return upon its necessary investment, which is embodied in the structure and its natural increment, if any, that goes but a little way toward the solution of the problem, owing to the difficulty of saying just what is reasonable in a given case. That must for the most part be left to the good judgment of the tribunal which passes upon each particular case.'

"Taking this view of the case, we come to the place where 'the good judgment of the tribunal which passes upon each particular case' must be exercised."

#### 710—Schedules.

"The old rate of this company seems to have been constructed in the darker ages of electric light rate making. It was so arranged that all home lighting and most of the store lighting would cost 10 cents per K. W. H. It was an unscientific and unbusinesslike schedule of rates.

"The rates provided for by the city's ordinance were based upon the company's plan, and retained all the crudities and unfairness of the old method. The ordinance simply lowered some of the figures, which would have decreased the gross earnings of the company without decreasing its load or increasing its income.

"It is decided that both schedules of rates shall be set aside. We prescribe rates that will reduce the cost of service to more than ninety per cent of the users of electric service, without increasing the cost to the remaining users. It is our opinion that these reductions are so arranged that they will compel the company to enlarge its capacity and to install more efficient and, therefore, more economically operated machinery. We believe that the rate which we set forth will encourage the use of electricity by the people of Bucyrus to such an extent that although inadequate under present conditions of business and cost of operation, it will prove to be compensatory to a proper degree. It is impossible to be absolutely sure of the effect of an electric light rate for a term of years, which leads us to say that the Commission ought not to be compelled, as it now is, by statute, to do the impracticable, namely, to fix a proper rate for service for a fixed number of years. The rate that we herewith fix may prove too high or too low before the expiration of the period covered by the ordinance, yet one party or the other will be bound to an unjust situation for the balance of the life of the rate."

**720—Rate Schedules.****RESIDENCE LIGHTING RATE.****Rate.**

- 10 cents net or 10.5 cents gross per kilowatt hour for the first 30 hours' use per month of connected load.
- 7 cents net or 7.35 cents gross per kilowatt hour for the next 30 hours' use per month of connected load.
- 3 cents net or 3.15 cents gross per kilowatt hour for all current used in excess of the above, 60 hours' use per month of connected load.

**Determination of Active Connected Load.**

The rates are based on the connected load, excluding certain household appliances and lights in cellars, closets, etc., and including certain domestic appliances, such as electric stoves and disc stoves (over 500 watts) at one-half of their total known maximum capacity.

**Prompt Payment Discount.**

Bills will be rendered at the gross rates, and the difference between the gross and the net rates herein specified will constitute a discount for prompt payment, provided bills are paid on or before the tenth day of the month succeeding the month within which service was rendered.

**Minimum Charge.**

50 cents per month.

**COMMERCIAL LIGHTING.****Rate.**

- 10 cents net or 10.5 cents gross per kilowatt hour for the first 30 hours' use per month of connected load.
- 7 cents net or 7.35 cents gross per kilowatt hour for the next 30 hours' use per month of connected load.
- 3 cents net or 3.15 cents gross per kilowatt hour for all current used in excess of the above 60 hours' use per month of connected load.

**Determination of Active Connected Load.**

The following percentages of the connected load (connected load to be determined as in the residence lighting schedule) shall be deemed active:

- 95%, first 1 kilowatt.
- 90%, next 2 kilowatts.
- 70%, all over 3 kilowatts.

**Prompt Payment Discount.**

Bills will be rendered at the gross rates and the difference between the gross and the net rates above specified will constitute a discount for prompt payment, provided the bills are paid on or before the tenth day of the month succeeding the month within which service was rendered.

**Minimum Charge.**

50 cents per month.

**SIGN AND WINDOW LIGHTING.**

For the user of signs and show windows for current from dusk to 10 o'clock P. M. every night.

**Rate.**

7 cents per kilowatt hour.

**Minimum Charge.**

\$2.00 per month.

**BREAK DOWN SERVICE.****Rate.**

The consumer, at the time of making application for this service, shall designate whether he will operate under the residence lighting rate or the commercial lighting rate.

**Prompt Payment Discount.**

Bills will be rendered at the gross rates and the difference between the gross and the net rates herein specified will constitute a discount for prompt payment, provided the bills are paid on or before the tenth day of the month succeeding the month within which service was rendered.

**Minimum Charge.**

\$3.00 net per month per kilowatt of connected load.

**POWER RATES—A.****Rate.**

- 5.85 cents net or 6.142 cents gross per kilowatt hour for 0 to 97 kilowatt hours consumed per month.
- 5.4 cents net or 5.67 cents gross per kilowatt hour for 98 to 194 kilowatt hours consumed per month.
- 5.18 cents net or 5.439 cents gross per kilowatt hour for 195 to 388 kilowatt hours consumed per month.
- 4.95 cents net or 5.192 cents gross per kilowatt hour for 389 to 582 kilowatt hours consumed per month.
- 4.5 cents net or 4.725 cents gross per kilowatt hour for 583 to 970 kilowatt hours consumed per month.
- 3.94 cents net or 4.137 cents gross per kilowatt hour for 971 to 1455 kilowatt hours consumed per month.
- 3.38 cents net or 3.549 cents gross per kilowatt hour for 1456 to 1940 kilowatt hours consumed per month.
- 2.88 cents net or 3.024 cents gross per kilowatt hour for 1941 to 2910 kilowatt hours consumed per month.
- 2.84 cents net or 2.982 cents gross per kilowatt hour for 1911 to 3880 kilowatt hours consumed per month.
- 2.79 cents net or 2.929 cents gross per kilowatt hour for 3881 to 4850 kilowatt hours consumed per month.
- 2.79 cents net or 2.929 cents gross per kilowatt hour for 4851 to 5820 kilowatt hours consumed per month.
- 2.75 cents net or 2.887 cents gross per kilowatt hour for 4851 to 5820 kilowatt hours consumed per month.
- 2.65 cents net or 2.782 cents gross per kilowatt hour for 5821 to 7760 kilowatt hours consumed per month.
- 2.5 cents net or 2.625 cents gross per kilowatt hour for 7761 to 9698 kilowatt hours consumed per month.
- 2.25 cents net or 2.362 cents gross per kilowatt hour for 9699 to 14547 kilowatt hours consumed per month.
- 2.16 cents net or 2.268 cents gross per kilowatt hour for 14548 to 19396 kilowatt hours consumed per month.

**Prompt Payment Discount.**

Bills will be rendered at the gross rates, and the difference between the gross and the net rates herein specified will constitute a discount for prompt payment, provided bills are paid on or before the tenth day of the month succeeding the month within which the service was rendered.

**Minimum Charge.**

\$1.00 per month net for motors of 5 horse power or less, and 20 cents per horse power for motors of more than 5 horse power.

**POWER RATE—B (OPTIONAL).****Rate.****Demand Charge.**

\$3.00 net per month per kilowatt of maximum demand, plus an

**Energy Charge of**

1 $\frac{3}{4}$  cents net per kilowatt hour.

**POWER, INCLUDING INCIDENTAL LIGHTING—C.****Rate.**

Power consumers taking service under rate schedules A or B, having a connected load of 20 H. P. or more, may include incidental lighting service under those rate schedules, provided the connected load of the lamps so included does not exceed 15% of the connected power load. If the connected load does exceed the above 15% of connected power load, the lighting service must be supplied through a separate meter and be paid for under the lighting rate schedules.

**Determination of Connected Load.**

The connected lighting load shall be predetermined by the percentages established for ascertaining the connected load under the Commercial Lighting Rate Schedule.

The combined connected lighting load and power load shall constitute the connected load upon which the rate will be computed.

**CALIFORNIA****419—Return for Different Character of Service.**

Application of PACIFIC GAS AND ELECTRIC COMPANY, Asking for Authority to Charge the Diamond Match Company a Special Low Rate. Decision of the CALIFORNIA RAILROAD COMMISSION, Authorizing the Rate and Imposing Conditions. September 15, 1914.

"On April 17, 1910, Pacific Gas and Electric Company entered into a contract with the Diamond Match Company for electric energy, to be supplied at Barber and Chico, at the rate of .5 cent per kilowatt hour. The term of the contract was four years, and the low rate therein specified was presumably the result of competition then existing between Pacific Gas and Electric Company and Sacramento Valley Power Company in and adjacent to the city of Chico. This contract has now expired and Pacific Gas and Electric Company desires to renew the same for a period of five years from June 15, 1914, at the rate of .65 cent per kilowatt hour, in accordance with terms specified in a proposed agreement . . .

"In Case No. 400, Town of Antioch vs. Pacific Gas and Electric Company, [5 RATE RESEARCH 264] this commission found that the average cost to Pacific Gas and Electric Company for production and transmission of electric energy, including interest on the investment, is .7312 cent per kilowatt hour, delivered at the low tension terminals of the sub-station transformers. This sum does not include any item for distribution or for substations . . .

“Without going into the details, it appears that the proposed rate to be accorded to Diamond Match Company, while exceeding the bare cost of service, exclusive of interest, will not be sufficient to return to Pacific Gas and Electric Company even as much as one-half of the interest to which the Company claims to be entitled. On the other hand, the former rate of .5 cent per kilowatt hour involved a greater loss than the proposed rate, so that the new rate is a step in the right direction. Furthermore, if Pacific Gas and Electric Company should lose this business, the investment which the company has already made under the former contract to serve Diamond Match Company might be rendered valueless except for scrap. Finally, it appears from the evidence in the Town of Antioch case that Pacific Gas and Electric Company should have excess energy during this year, so that the company naturally desires to secure the additional gross revenue which will result from this business and which will amount to some \$13,000.00 per year, even though the company does not receive the full return to which it believes itself to be entitled.

“The situation is complicated by the fact that other consumers of Pacific Gas and Electric Company who are approximately in the same class as Diamond Match Company or in a better class, are paying a higher rate than that which is to be accorded to Diamond Match Company. If any of these consumers apply for a reduction in their rates, it may be necessary to open up the entire matter.

“After a careful consideration of all the aspects of the question, I recommend that the application be granted, subject to the conditions specified in the order.” . . .

The order authorized a rate of .65 cent per kilowatt hour subject to the following conditions:

“Such losses, if any, as may be incurred by Pacific Gas and Electric Company from this business shall be borne by Pacific Gas and Electric Company and not by the company’s other consumers, or any of them.

“The rate hereby authorized will be deemed by the Railroad Commission as applicable to other consumers of Pacific Gas and Electric Company, who may show themselves to be consuming electric energy under circumstances fairly comparable with the conditions surrounding the consumption of electric energy by Diamond Match Company.

“The Railroad Commission reserves the right, as in all cases of this kind, to reopen the matter at any time, without being bound by the five-year provisions of the agreement.”

#### **540—Minimum Charge.**

Application of the WEST COAST GAS COMPANY For the Establishment of a Minimum Rate for Gas. Decision of the CALIFORNIA RAILROAD COMMISSION, Approving a Minimum Charge. September 10, 1914.

“It appears that in a portion of the territory served by applicant, particularly at Newport Beach, a large proportion of applicant’s

customers own cottages which are occupied during two or three months in the summer and that during the remaining portion of the year they are occupied only occasionally or not at all. The owners of these cottages object to paying a minimum of \$1.00 during the entire twelve months.

"However, applicant's plant must be maintained in readiness to serve during the entire year and applicant's investment is tied up and its system depreciates during the entire twelve months. Hence it seems only fair that as long as applicant's customers remain connected to applicant's system they should pay a reasonable minimum monthly. Applicant must be ready to serve at a moment's notice every customer who is connected to its system, and a proper proportion of its investment and of the depreciation is fairly chargeable to each such customer. The sum of \$1.00 per month is a usual minimum charge for gas. I see no reason why it should not apply to applicant, provided that its customers understand that they have the right to have their service discontinued at any time and thus avoid the further payment of any minimum until the premises are again connected. A fee of \$1.00 is reasonable for again making the service connection. . . ."

#### 980—Public Relations.

"There has been much confusion among applicant's customers as to what minimum, if any, should be paid. These customers have been entirely willing to pay such minimum as might be fair, but have been uncertain as to whether applicant's demands have been just. In order to settle these doubts and clear the atmosphere, I recommend that applicant be directed to print or mimeograph and send a copy of the opinion and order herein to each customer whose consumption of gas has been such, during any month in the year ending August 31, 1914, as to bring him within the minimum herein established."

### NEW JERSEY

#### 144—Mergers.

Application of AMERICAN MALT CORPORATION AND AMERICAN MALTING COMPANY for Approval of Merger. Decision of the NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS, Dismissing the Application, February 27, 1914.

After citing the New Jersey Statutes pertaining to the regulation of corporate relations the decisions say:

"In general, therefore, the Board is of opinion that, inasmuch as formal approval by a State tribunal is now, of necessity a requirement in the case of every merger, the company resulting from such merger may properly be required to show at the time of merger, (1) assets behind its securities in amount sufficient to conform with the requirements imposed by the State upon companies newly



incorporating under its laws; (2) that such a merger must not by any of its terms subject any security holder in any of the consolidating or merging companies to an unfair or inequitable condition or arrangement; (3) that in the carrying out of such merger it must be affirmatively shown that each and every statutory requirement applicable in the premises has been complied with. . . .

"Since this Board is required to pass upon the question of the fairness of the plan to all parties interested, and should be able to find affirmatively that the proposed scheme is fair and equitable, and in all probability the best obtainable for all concerned, the burden rests upon the petitioners to establish these things. It may be that the plan proposed (by the applicants in this case), is the best than can be devised. It is not, however, supported by proof. Facts and reasons establishing it as the most practicable, feasible and fair means of reorganization should be submitted. This Board and dissenting stockholders should not be asked to accept conjecture in place thereof. . . . The effect of the consolidation and merger of corporations is to organize a new corporation, clothed with the powers and privileges of the merging corporations, and subject to such limitations as are imposed by law. In passing upon the capitalization, etc., of the resulting corporation the same rules as apply to an entirely new corporation should be regarded."

The Commission finds that in this case the property is worth less than the proposed capitalization by some millions of dollars. It also points out that the property of the Malting Company is not cognate in character and use to the property used or contemplated to be used by the Malt Corporation, in the conduct of its own proper business. The Malting Company is an operating company and the Malt Corporation, a holding company.

## REFERENCES

### RATES

#### 400—Rate Theory.

VARIABLE GAS RATES, Abstract of Paper by HENRY L. COLEMAN. Read at the Meeting of the Empire State Gas and Electric Association, New York, October 2, and Editorial. *Electrical World*, October 10, 1914, pages 703 and 697.

The paper states that uniform rates are economically wrong and a part of the paper is devoted to the subject of special rates for special uses. The editorial, commenting on this paper, says that for many years there has been little change from the old time practice of selling gas at a fixed price per unit of volume used but in some localities different rates have been made for different kinds of service with resultant advantage to the producer and without loss to the user.

**411.1—Customer Charges.**

A CHANCE FOR ECONOMY IN PUBLIC-UTILITY SERVICE. Editorial, *Engineering News*, October 15, 1914, page 789.

It is pointed out that gas-, electricity-, and water-supply and even telephone-service companies continue to send out bills every month, or twelve times a year, when quarterly meter reading and billing, or only four times a year, would save from 25% to 40% of the amount of the smallest bills rendered and from 10% to 15% of the annual cost of serving a very considerable proportion of its patrons. The large saving that may be brought about in the consumer costs is illustrated by the figures submitted by the Boston Edison Company in 1909, when the Massachusetts Board of Gas and Electric Light Commissioners inquired into the company's minimum monthly charges. In 1912 the New Jersey Public Service Commission inquired into the monthly minimum rates of the Public Service Corporation, and a table of monthly costs per consumer, taken from the books of this company, are also given. By cutting down the cost of collection, the minimum charges and effective unit prices can be lowered to attract the small customers, who are desirable additions if they pay their cost, since they increase the diversity of load and the popularity of service. It is a matter of recorded experience that the generating capacity needed to carry the small electric light customers' load may be only about a third that indicated by the sum of their maximum demands and a fifth that shown by their installed fixtures. It cannot be said that reading meters and rendering bills quarterly instead of monthly is impracticable, nor that it would impair the business of the companies, since many prosperous water companies follow this plan and have always followed it.

## INVESTMENT AND RETURN

**300—Investment and Return.**

THREE-CENT FARE CONFISCATORY SAYS JUDGE KILLITS IN TOLEDO CONTROVERSY.  $\frac{1}{2}$  page *Aera*, October, 1914, page 265.

In granting an injunction to the Toledo Railway and Light Company against the enforcement of the 3-cent fare ordinance, Judge Killits of the United States Circuit Court questioned the good faith of the city officers in passing the ordinance, which he pointed out was "passed to adoption through three readings at one sitting by a council and urged by an administration whose friends had just suffered defeat at an election." As to the reasonableness of the rate the opinion says: "Averaging all the lines together, if the public insists upon the present routing, any man capable of doing sums in simple arithmetic can see that an average rate of three cents is too low."

**330—Capitalization.**

INVESTMENT BANKERS AND PUBLIC SERVICE ACCOUNTANTS, by H. S. SWIFT. Read Before the American Electric Railway Association, at its Convention, Held at Atlantic City, N. J., October 12-16, 1914. Pamphlet, 11 pages.

The report outlines the class of information desired by investment bankers in considering the underwriting of the securities of public service corporations. Investment bankers are now greatly interested in these corporations. The immense amounts of money required each year to meet the demands of customers for service is the explanation. These demands are increasing in a ratio much greater than the growth in population, because of the increased use of the service of public service corporations by the average customer and the large sums which have been expended for improvements and additions during the past years are

barely keeping up with the growth of the business. Estimated requirements for the future are startling in amount. Some time ago a prominent banker estimated future new capital requirements for electric business alone at the rate of \$400,000,000 per annum, and if we add to this amount the requirements for street and interurban properties and other public utilities other than steam railroads, a billion a year, nearly \$100,000,000 a month, is a conservative estimate. Other enterprises can delay furnishing service during periods of dear money, but electric light service must be furnished instantly on demand and cannot be stored up for future use. Electric railways service must also be furnished promptly. Facilities for furnishing these services must, therefore, be provided in advance of demand.

### **360—Depreciation.**

THE ACCOUNTING TREATMENT OF DEPRECIATION, by ROBERT SEALY. Paper Read Before the American Electric Railway Accountants, Association, at its Convention Held at Atlantic City, N. J., October 12-16, 1914. Pamphlet 21 pages.

The paper treats the subject of depreciation from the standpoint of "Insurance Replacements," rather than from the viewpoint of "Wasting of Assets." It briefly reviews the attempts of the standard classifications of accounts prescribed by regulating commissions to draw lines of demarcation between ordinary maintenance charges and charges to depreciation reserve, when such reserve has been created on the books of the corporation, and indicates the twilight zone within which these attempted distinctions lie.

It introduces the actuarial theory of financing depreciation or the creation of reserves, and contrasts some of the more usual methods of estimating depreciation allowance. A distinction is drawn between the engineer's problem of appraising the present value of physical assets and the accountant's problem of accounting for the financing of replacements.

### **361.5—Electrolysis.**

REPORT OF THE COMMITTEE ON ELECTROLYSIS. Read Before the American Electric Railway Engineering Association, at its Convention, Held at Atlantic City, N. J., October 12-16, 1914.

The Committee reported progress in its investigations, but announced that it is not prepared to publish a report at present. Study of the subject will be continued, with results at any time accessible to member companies.

## **PUBLIC SERVICE REGULATION**

### **140—Relations of Corporation with Each Other.**

REPORT OF JOINT COMMITTEE ON JOINT USE OF POLES. Before the American Electric Railway Association, at its Convention, Held at Atlantic City, N. J., October 12-16, 1914. Pamphlet, 26 pages.

The report consists of two sections, one of which presents a form of agreement for the joint use of poles, and the other prescribes specification for construction. The committee has attempted to produce a form of agreement and specifications under which all pole-using public utilities could use to advantage one or more pole lines, jointly. Considerable effort was directed toward reconciling the views of the various individual interests, which were likely to become parties to joint use, either from compulsion by municipalities and commissions, or from choice.

**222—Accounts.**

REPORT OF THE JOINT COMMITTEE ON ENGINEERING ACCOUNTING. Before the American Electric Railway Association, at its Convention, Held at Atlantic City, N. J., October 12-16, 1914. Pamphlet, 10 pages.

The subject is discussed under three main headings, Overhead Charges, Inter-Departmental Charges and Cost Accounting.

**226.5—Standards of Service.**

ILLINOIS STANDARDS OF GAS SERVICE. Copy of Rules and Editorial. *The Gas Age*, October 15, 1914, p. 382-383, and p. 363.

The general service rules for gas and electric service and the special gas service rules are copied in full.

The editorial states that the rules established by the Illinois Commission are reasonable, and concludes as follows: "Remembering always that we are selling heat and service, under various consumers' requirements and suppliers' conditions, it follows that rules cannot be uniform nor of cast iron inflexibility. That is the beauty of commission regulation. They can modify, revise, readjust and in general suit the means to the required end without working hardship on any one; whereas legislative enactments are generally carried out to the letter, regard less of who is being hurt by so doing. The excellent work done in the past few years in rules for service is one of the most hopeful signs of how generally the spirit of progress is pervading the industry."

## MUNICIPALITIES

**840—Public Operation.**

MUNICIPAL OWNERSHIP OF STREET RAILWAYS IN THE DISTRICT OF COLUMBIA. Amended Report of the Committee on the District of Columbia, Committed to a Committee of the Whole House, July 14, 1914, 35 pages.

The Committee on the District of Columbia, to which was referred the bill (H. R. 15191) to provide for the acquisition, ownership and operation by the Commissioners of the District of Columbia of all the street railroads located in the District of Columbia, have submitted an amended report, prepared by Mr. Crosser, recommending that the bill be favorably passed upon by the House.

**840—Public Operation.**

THE CLEVELAND MUNICIPAL ELECTRIC PLANT. Letters by WILLIAM D. KERR and F. W. BALLARD. *Engineering News*, October 15, 1914, page 793.

The letter by Mr. Kerr is a reply to the editorial article on Cleveland's new municipal electric plant in the issue of July 30. (See 5 RATE RESEARCH, 304.)

In the reply it is stated that the Cleveland municipal plant is not embarking on the business of supplying the entire people of Cleveland with electricity. It is undertaking to supply a few people and it is in a position to pick its own territory and its own customers.

The fact seems to be that the 3 cent maximum rate is a fiction, in that its application is to be restricted by limiting the customers to whom service is rendered. Some selective device must be employed, as admittedly there is not enough

capacity for the entire city. It is not competition for a municipality to set up an electric plant to take the cream of the business of a private company. Rather it is a modern form of highway robbery. The duty to serve entire communities is a heavy responsibility resting on central station companies, which must inevitably affect the rate so long as there are material differences in the use made of the facilities by different classes of consumers. The City of Cleveland is imposing a heavy responsibility on all of its citizens for the supposed benefit of a favored few in an enterprise which will redound ultimately to the disadvantage of all, through the violation of an economic law that monopoly most advantageously can conduct a business characterized by increasing returns.

Mr. Ballard says that the foregoing criticisms are based upon two erroneous assumptions: The area supplied by the new municipal plant is not so restricted, and there is a minimum charge of 50 cents per customer, intended to cover the cost of billing and collecting.

#### **840—Public Operation.**

SOME RESULTS OF SEATTLE'S MUNICIPAL RAILWAY. *Stone and Webster*, 4 pages, October, 1914, page 264.

Statistics taken from the financial statement issued by the city's department of public utilities and the comptroller's office are given showing that the loss in operating Seattle's two municipal railway lines to July 31 has been continued during August. The fact is especially noteworthy, for in the same week that the city comptroller's office announced the first official figures regarding the operation of the new municipal venture, the city council, in its tax budget for 1915, announced that nothing would have to be levied for the operation of the municipal railway, as the total expense of operation for the year, would amount to \$66,985.50, and that—strangely enough—the total revenues would amount to identically the same sum, namely, \$66,985.50.

#### **840—Public Operation.**

REPORT ON SEATTLE MUNICIPAL SYSTEM, 2 pages, *Electrical World*, October 10, 1914, page 705.

The lighting department of the City of Seattle issued its second report for the years 1912 and 1913. Shortly after the issuance of the report complaint was made that the hydro-electric cost data and much of the other information given in it were not founded on facts. The matter was investigated. Various criticisms of the report are set forth, together with the answers of the superintendent of the plant defending his figures.

### **GENERAL**

#### **750—Comparative Company Data.**

MASSACHUSETTS LIGHTING COMPANIES COMPARED. *Electrical Review and Western Electrician*, October 17, 1914, page 749.

A study of the statistics given in the returns of Massachusetts electric lighting companies for the year ended June 30, 1914, shows that marked gains have been made in volume of electricity generated and in the several departments of distribution. Some of the companies show a larger ratio of operating expense to gross earnings than they did for the year before, but the growth in business provides for the larger proportion of outgo, and the conservative policy on which the Massachusetts companies are conducted makes them notably safe businesses, and their securities, with scarcely an exception, well above par value in the investment market. A table is included in the article showing comparative data for seven leading Massachusetts electric lighting companies for the year ending June 30, 1914.

**788—Service Rules.**

STANDARDIZED SERVICE CONNECTION PRACTICES, by HARVEY E. HEMENWAY. *Electrical Review and Western Electrician*, 2 pages, October 17, 1914, page 747.

Suggestions are given pertaining to line extensions, service connections, wiring requirements, service entrances, meters and provisions for motors and other devices consuming considerable current. These suggestions are intended to serve as a guide in the formulation of standard rules of practice. "Central stations should adopt standard practices regarding the connection of consumers to their lines. That is, they should compile and follow certain set rules relating to the making of service connections and should connect no consumer until his installation has satisfied these rules. Most of the large central stations have standardized their usages in this respect; but by far the majority of the smaller ones have not. This is likely to cause them difficulties, because there should be no discrimination between consumers. One consumer should receive precisely the same consideration as any other. The suggestions given will not, without modification, apply to every case, but they will at least serve as a guide to assist in the formulation of methods that will satisfy any specific condition."

**980—Public Relations.**

ELECTRIC RAILWAY SECURITIES FROM THE COMPANIES' STANDPOINT, by CALVERT TOWNLEY. Read Before the American Electric Railway Association, Held at Atlantic City, N. J., October 12-16, 1914. Pamphlet, 9 pages.

The importance of securing for the electric railway industry the proper support of a sound and stable public opinion is clearly demonstrated. Great harm can be done the industry by the false statements loudly proclaimed and oft repeated, maligning the company's dealings with the public, past and present. The people served, as well as the companies, are interested in the continued welfare of the industry. In order to obtain the increase in street railway investments necessary to provide for the proper growth of the industry, a better understanding with the public must be secured. The terms upon which securities can be issued are largely under the control of commissioners who are representing the public or the customers, rather than the companies. Publicity should attempt to firmly establish in the public mind certain fundamental economics which, stated very briefly, are: First. Railways must grow with the communities they serve. They are by no means completed entities which simply have to be operated and maintained. Their growth cannot occur unless a continued supply of new capital is available from outside sources. Second. Security selling is competitive, just as is that of all merchandise. Investors have to be solicited to buy street railway bonds. Capital has been aptly likened to a fluid. It can no more be legislated into unremunerative channels than an Act of Congress can make water run up hill. Third. Financial and commercial conditions change. A rate of return that may be attractive today may be quite inadequate five years hence, or perhaps even next year, so that no man, however wise, can today predict the future, much less name hard and fast rates of return that we can know will continue to attract investors for a long term of years.

Now, if the man on the street can be made to absorb and believe these facts, he, his legislators, congressmen and public service commissioners will know that in just so far as their desire to make one-sided bargains with trolley properties leads them to reduce profits and make trolley securities less attractive will capital cease to flow into extensions and the growth of the affected communities will be throttled.

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No. 5

# RATE RESEARCH



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# Rate Research

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CONTENTS	Page
COMMISSION DECISIONS.....	67
Arizona.....	67
Massachusetts.....	71
Kansas.....	73
COURT DECISIONS.....	75
West Virginia.....	75
REFERENCES.....	78
Rates.....	78
Public Service Regulation.....	78
Municipalities.....	80
Court Decision References.....	80



# Rate Research

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Vol. 6

CHICAGO, OCTOBER 29, 1914

No. 5

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### ARIZONA

#### 132—Protection from Competition.

Application of the INTERNATIONAL GAS COMPANY, For Permission to Exercise Franchise. Decision of the ARIZONA CORPORATION COMMISSION, Granting the Certificate of Public Convenience and Necessity. September 12, 1914.

"The International Gas Company, applicant herein, desires to engage in the manufacture and distribution of electric energy in a field already served to the greater extent by the Nogales Electric Light, Ice and Water Company. Thus, the application in this case involves in addition to the ordinary features of an application for a certificate of convenience and necessity, the consideration of the rights and status of a company desiring to enter a field in which a similar company is already established.

"Following the precedent made by the California Railroad Commission in cases similar to the one at bar, we desire to announce the rule that the existing utility and the applicant are to be judged as of the time when the application is filed.

"A company, doing business of the kind proposed by the applicant, cannot logically expect to enter the territory served by a rival company, basing its reasons for so doing solely on reduced rates. To entitle such a company to the consideration of this commission, even where more important factors enter, it should show that the proposed rates are reasonable, where the public served is concerned, and represent a reasonable rate of return upon the property used and useful in the operation of the business. . . ."

The rates offered by the companies are shown for comparison (see page 69) and the Commission says:

"It takes but a casual examination of these tables to ascertain that the proposed rates are a marked reduction over present and existing rates, and not a mere shading calculated to find approval."

The present company has no day load and has not met the demand for power service.

"If the established utility was in position to furnish adequate and satisfactory service at reasonable rates, equity and the general trend of commission decisions would at once make clear our duty in the premises, as it is entirely within the scope of the Commission to enforce good service and reasonable rates within the limits of the plant's capacity. If a territory is efficiently served and the utility has, to the very best of its ability, rendered reasonable treatment to its consumers, we will be extremely reluctant to allow competition, believing that ordinarily the distribution of electric energy is essentially and rightly monopolistic in its application. We are aware that competition in electric lighting is likely to occasion evils which may not be apparent on the surface of affairs, but which more than offset temporary rate reductions offered by rival companies, and it is our policy to test most carefully any application involving competition, that we may determine whether public convenience and necessity can be best subserved by the granting of such an order.

"Again following the able precedent established by the California Railroad Commission, we announce that one of the few cases where competition will be allowed is where the competitor can more adequately furnish the commodity used at substantially lower rates than those accorded by the existing company. The improvement of service and the reduction of rates must be of such considerable scope that the public interests demand such, and no makeshift created for the purpose of according cut-throat competition. Competition does not necessarily mean duplication unless the territory served is completely served, and in the case at bar, we find no element of competition relative to power in particular.

"In the case before us, the record contains a mass of testimony to the effect that the Nogales Electric Light, Ice and Water Company is not maintained in a manner making possible a satisfactory or adequate distribution of electrical energy, and that the company is operating without expressed authority from the Town of Nogales, Arizona. We do not regard this latter point, regarding franchises or want of franchise, as material in the conclusions to be made herein, but prefer at this time to discuss service. . . ."

The present company admits that its service is inadequate and its plant obsolete, but states that the installation of a new plant is contemplated.

"In conclusion, we believe that the incumbent company is not equipped to provide adequate, safe and satisfactory service, nor has it given proper service for several years past. The inadequate and obsolete condition of the present plant, the substantial increase of prevailing rates over the rates proposed by the applicant, the extension of service and development of new territory by the applicant, compel the belief on the part of this Commission, that the public convenience and necessity thereof, demand that the applicant be allowed to manufacture, generate and distribute electrical energy therein, and that the applicant be permitted to exercise the rights given by its franchise."

**720—Rate Schedules.**

The rates charged by the company serving the territory concerned and the rates proposed by the applicant company are set forth in the decision. The rates of the Nogales Electric Light, Ice and Water Company, rearranged in the Rate Research form, are as follows:

**DOMESTIC LIGHTING.****Rate.**

20 cents per kilowatt-hour.

**Quantity Discounts.**

10% off on bills of \$10.00 and up to \$20.00.

20% off on bills of \$20.00 and up to \$30.00.

30% off on bills of \$30.00 and more.

**Minimum Charge.**

\$1.00 per month per meter.

**BUSINESS LIGHTING.**

Peak load consumption.

**Rate.**

20 cents per kilowatt-hour.

**Quantity Discounts.**

10% off on bills of \$10.00 and up to \$20.00.

20% off on bills of \$20.00 and up to \$30.00.

30% off on bills of \$30.00 and more.

**Minimum Charge.**

\$1.00 per month per meter.

Off peak consumption.

**Rate.**

Stores and other business places closing at midnight, 12 cents per kilowatt-hour.

Stores and other business places closing at 3 A. M. or after, 10 cents per kilowatt-hour.

**Minimum Charge.**

\$1.00 per month per meter.

**MUNICIPAL LIGHTING RATES.**

All night schedule.

**Rate.**

\$8.50 per month per 250 watt Mazda lamp.

\$5.00 per month per 150 watt Mazda lamp.

\$3.00 per month per 100 watt Mazda lamp.

\$1.50 per month per 25 watt Mazda lamp.

**FLAT RATES.**

Churches and Clergy.

**Rate.**

\$1.50 per month per consumer.

Domestic Lighting.

**Rate.**

\$1.75 for 1 light per month.

\$1.25 per light for 2 lights per month.

\$1.15 per light for 3 lights or more per month.

Commercial Lighting.

**Rate.**

\$1.75 for one light per month.

\$1.50 per light for 2 lights or more per month.

The proposed rates of the International Gas Company are as follows:

**LIGHTING RATES.**

**Rate.**

12 cents per kilowatt-hour for the first 100 kilowatt-hours consumed in any one month.

11 cents per kilowatt-hour for the next 100 kilowatt-hours consumed in any one month.

9 cents per kilowatt-hour for the next 100 kilowatt-hours consumed in any one month.

7 cents per kilowatt-hour for the next 200 kilowatt-hours consumed in any one month.

6 cents per kilowatt-hour for the next 250 kilowatt-hours consumed in any one month.

5 cents per kilowatt-hour for the next 250 kilowatt-hours consumed in any one month.

4 cents per kilowatt-hour for all over 1000 kilowatt-hours consumed in any one month.

**Minimum Charge.**

\$1.00 per month per meter.

**POWER RATES.**

**Rate.**

10 cents per kilowatt-hour for the first 100 kilowatt-hours consumed in any one month.

9 cents per kilowatt-hour for the next 100 kilowatt-hours consumed in any one month.

8 cents per kilowatt-hour for the next 100 kilowatt-hours consumed in any one month.

7 cents per kilowatt-hour for the next 200 kilowatt-hours consumed in any one month.

6 cents per kilowatt-hour for the next 250 kilowatt-hours consumed in any one month.

5 cents per kilowatt-hour for the next 250 kilowatt-hours consumed in any one month.

4 cent per kilowatt-hour for all over 1000 kilowatt-hours consumed in any one month.

**Minimum Charge.**

\$1.50 per month for 2 H. P. motors or less.

75 cents per month for each additional H. P.

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**MASSACHUSETTS****300—Investment and Return.**

Application of Municipal Light Board and the Manager of the READING MUNICIPAL LIGHT PLANT, for Authority to Charge Prices Alleged to be Less than Cost. Decision of the BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS. Consenting to the Prices in Question. October 6, 1914.

The applicants submitted certain rates for power, and for heating and cooking service which are alleged to be less than the cost of service.

"At the hearing it appeared that a sharp difference of opinion had arisen as to the policy pursued and to be pursued in the conduct of the plant's business. The advisability of having entered upon the supply of electricity in other towns was questioned. Doubt was expressed as to whether the plant investment had not increased more rapidly than was justified in the interest of the town, and the sale at so low rates of so much electricity in proportion to the total output was criticized. It seemed, also, to be conceded by all that the electricity furnished to the town for street lights was not paid for by the taxpayers at cost as defined by the statute. Some of the questions raised, however, as to the amount of investment and the extent of territory which the plant shall serve, seem to have already been conclusively settled by the town under specific legislative authority. The issue, therefore, in this case is not as to the reasonableness of the different prices already established, or even as to their fairness as between different customers or groups of customers, but rather as to the expediency of consenting to certain prices which are less than cost as defined by the statute."

**410—Cost of Service.**

"Before discussing the facts which are pertinent to this issue, it seems desirable to point out that the language of the statute prescribes explicitly the method for determining cost. It must include all operating expenses, interest on the plant investment at the rate paid upon the debt incurred therefor, the maturing debt requirements and depreciation reckoned at not less than 3 per cent. upon the cost of the plant; all electricity used by the town must be charged at cost. In applying these requirements to the fixing of a price the Legislature apparently intended by the term "cost" the average cost computed upon the total units or kilowatt hours delivered for all uses. Such interpretation necessarily gives no consideration to any differences in cost, which may exist between customers or groups of customers, growing out of differences in character or conditions of supply. If such differences which are not uncommon, result in actual and substantial differences in cost, the statutory requirement becomes so entirely arbitrary as to have compelled the Legislature to recognize that some departure from the strict interpretation of the rule laid down may be made with advantage to both the public and private interest involved."

It is pointed out that lighting service and power service have different characteristics.

"Because of these characteristics it is generally agreed that, broadly speaking, the unit cost of electricity delivered for power is usually materially less than that delivered for light and this difference has been made the justification for lower prices for power than for light, notwithstanding the great difficulty, perhaps impossibility, of accurately demonstrating the actual difference in cost for any individual customer."

**450—Value of Service Theory.**

"For this reason, and because of the fact that customers for power can readily supply themselves in other ways, power prices have doubtless been often determined by what the manager of a plant thought could be charged and command the business rather than by any very definite analysis of costs. Unless prices thus made are unreasonably low, the increased output secured, if without a corresponding increase of investment, has a tendency to decrease average unit costs, with resulting reductions in prices, for light."

**612—Power.**

"The prices for power, which have already been quoted, are concededly less than cost as defined by the statute, with the possible exception of the base price and one or more of the higher figures in the schedule, at which rates little, if any, electricity is likely to be sold. From the standpoint of the power customer they may not be low. If electricity is to be sold at all, prices as low as those in the schedule must probably be continued. As a matter of fact, under them the output for power has been substantially increased, and, although their full effect may not yet be realized it has apparently been of advantage to the business as a whole.

"It may also be proper to add that the lowest rate offered under this schedule shows little, if any, margin over the bare manufacturing cost of the current, and therefore the management is bound to watch over the development of the power business and the effect of such rates upon the entire operation of the plant with especial care, in order that no electricity shall be sold at an actual loss and an undue burden be thus imposed upon the taxpayers or any class of customers."

**614—Heating and Cooking.**

"The question with respect to the heating and cooking rates is similar. It appeared that comparatively little electricity has been sold under this rate, and it is quite evident that no electricity would be sold for this purpose at a rate as high as the cost computed under the statute. In fact, the price at which electricity can be sold for this purpose seems to have little to do with its cost, but depends rather upon its value to the customers. Moreover, because of the circumstances of its use for this purpose, it may under some conditions be furnished materially below cost, as defined in the statute, without actual loss to the plant. The propriety of trying to obtain this class of business

involves at the outset largely considerations of commercial expediency. Up to the present time the volume of the business under this rate appears to have been too small to have had any material effect either on the operations of the plant or its revenues. If it results in increasing output without proportionately increasing investment, the experiment will in a measure be justified. There was some indication at the hearing that this rate had been allowed for the use of irons and other small heating and cooking devices. While probably few will avail themselves of the rate for this purpose because of the minimum charge, it is doubtful whether commercial necessity or expediency requires other than regular rates for such devices in cases where the volume of such business is relatively small."

#### **720—Rate Schedules.**

The lighting rate in Reading is 10 cents net or 10.8 gross.

The rates submitted by the municipality and approved by the Board are as follows:

#### **Rate.**

#### **POWER**

8 cents per kilowatt-hour for	200 kilowatt-hours or less.
7 cents per kilowatt-hour for from	201 to 300 kilowatt-hours.
6 cents per kilowatt-hour for from	310 to 400 kilowatt-hours.
5 cents per kilowatt-hour for from	401 to 500 kilowatt-hours.
4½ cents per kilowatt-hour for from	501 to 750 kilowatt-hours.
4 cents per kilowatt-hour for from	751 to 1,000 kilowatt-hours.
3½ cents per kilowatt-hour for from	1,001 to 1,500 kilowatt-hours.
3 cents per kilowatt-hour for from	1,501 to 10,000 kilowatt-hours.
2½ cents per kilowatt-hour for over	10,000 kilowatt-hours.

#### **HEATING AND COOKING RATE.**

Current used for cooking and heating, when metered separately.

#### **Rate.**

4 cents per kilowatt-hour.

#### **Prompt Payment Discount.**

10 per cent, if paid on or before the 15th of the month following the date of the bill.

### **KANSAS**

#### **300—Investment and Return.**

Application of the EMPORIA TELEPHONE COMPANY to change its Rate for Four-Party Service. Decision of the KANSAS PUBLIC UTILITIES COMMISSION, Dismissing the Application. July 23, 1914.

The company submitted data to show the cost of furnishing the class of service in question.

"It is impossible to fix rates for any given class of service, based on testimony such as is presented in this case. The Commission believes it to be impossible to fix rates on any given class of service, without taking into consideration the entire operation and value of the plant, which has not been done in this case . . . ."

The Commission points out that the data are inadequate and that any attempt to allocate the cost of a particular class of service would result in an unreliable estimate.

"In addition to these facts, it has been repeatedly held by the courts, that the question as to whether or not the rate on any one given class of service is compensatory or not, is not the vital question.

"It is a well established legal fact that the sufficiency of any rate of a utility should be governed by the amount of its total operating revenues and total legitimate expenditures. The reason for this rule is evident, when we consider the impossibility of reaching an equitable conclusion in a case such as the one before us, where there is a wide range of testimony, all of which must be based on arbitrary assumptions.

"The testimony shows that this petitioner and the city of Emporia have been in a long and extended legal controversy, and there is introduced in evidence a copy of a signed stipulation between the contending parties, which recites, in part, that the pending suit in the District Court of Lyon County, Kansas, is to be dismissed with prejudice at the cost of defendant; that the Emporia Telephone Company agrees to pay to the city of Emporia the sum of \$100 per month, commencing on the first day of January, 1914, and continuing for a period of five years, which payment, is to be in lieu of any pole rental tax, or any tax for the use and occupation by said company, of the streets, alleys and public grounds of said city, during said period of five years; and it is also agreed that, in consideration of the foregoing, the rate of \$1.25 per month for party line service, which is asked for by the petitioner in this case, will not be contested by, or objected to by the said city of Emporia; and if the Public Utilities Commission shall not approve the said party rate of \$1.25 to become effective April 1, 1914, then this agreement shall in all respects forthwith cease and determine and be of no force or effect.

#### 220—General Powers of Commissions

"This Commission has repeatedly held that it is an administrative body, rather than a judicial one. It is an established principle of law that the city of Emporia has the legal right to assess pole rental tax, or tax for the use and occupation of its streets and alleys against the Emporia Telephone Company; but the courts have held that such a tax must be fair and reasonable.

"It is the province of the court rather than of this Commission to pass upon the fairness and reasonableness of the payment of the sum of \$100 per month by this petitioner to the city of Emporia, as provided for in the contract above referred to; and the Commission would much prefer not to express any opinion in the matter. However, since the approval of this Commission is a condition precedent to the operation and enforcement of the contract, it seems necessary to pass upon that question."



**380—Taxation.**

"Any such tax, or similar expenditures out of the ordinary, paid by any telephone company, naturally and logically falls finally upon that portion of the public using the telephone service.

**381—City.**

"It is unquestionably true that any tax paid by a telephone company to a city greater than is borne by other property, adds just that much additional burden to the users of the telephone service. The Commission feels that in this case the necessity for raising additional funds to carry out the contemplated contract, herein referred to has prompted this petitioner to file this petition for increase of rates for this particular class of service. The provision of the contract, as to the payment of \$100 per month to the city of Emporia by the telephone company is not fair and reasonable. On the contrary, it is an exorbitant sum, and the Commission will therefore not approve the petition for increased rates, believing if it did so that the four-party line subscribers alone will be compelled to pay this unreasonable tax."

**COURT DECISIONS****WEST VIRGINIA****300—Investment and Return.**

MANUFACTURERS' LIGHT AND HEAT COMPANY V. OTT ET AL, PUBLIC SERVICE COMMISSION OF WEST VIRGINIA, Applying for a Temporary Injunction to Enjoin the Commission from Putting in Effect a Reduction in Rates. Decision of the DISTRICT COURT, N. D. WEST VIRGINIA, Denying the Application. July 29, 1914. 215 Federal 940.

The Public Service Commission of West Virginia made an order, April 22, 1914, fixing rates for natural gas furnished in the state of West Virginia by Manufacturers' Gas Company, Tri-State Gas Company, Wheeling Natural Gas Company, Ohio Valley Gas Company, Blackville Oil, and Gas Company, Cameron Gas & Oil Company, Wetzel Gas Company and New Cumberland Water & Gas Company. The application calls in question before the court the legality of the action of the Commission and alleges that the rates fixed are unreasonable.

**220—General Powers of Commissions.**

"The Statute creating the Public Service Commission and prescribing its powers and duties enacted February 20, 1913, is attacked on the grounds that it confers legislative, executive and judicial powers and unites the three forms of power in one Commission, contrary to the Constitution of the state. Detailed analysis of the statute is not required to show that it is in no essential particular unlike the numerous similar statutes which have been sustained by the courts. It confers the power to investigate and ascertain if the public service corporations of the kind named in it are charging reasonable rates,

as a means of fixing reasonable rates for the future; but no judicial power is conferred to adjudge damages or other relief for making unreasonable charges or for other violations of law. The provisions for appeal from the orders of the Commission to the Supreme Court of the state does not connote judicial power in the Commission. The point is decided by the Supreme Court of the state in *United Fuel Co. v. Public Service Commission* (W. Va.) 80 S. E. 931, holding that the appeal provided only meant to enlarge somewhat the power before exercised under the writs of mandamus and prohibition; that under it the court could not review any act of the Commission falling within the scope of its power; that the court's action must be judicial in holding the Commission within its sphere as prescribed by the statute and limited by the statute, the Constitution of the state, and the Constitution of the United States, as distinguished from the limited administrative power of the Commission. The powers of the Commission have no feature of the executive branch of the government, for it controls no power nor machinery for the enforcement of its orders. The Legislature of the state has not delegated its legislative power, but merely provided an agency for carrying out the legislative scheme with respect to public service corporations. The statute falls within the distinction thus stated by Justice Day in *Interstate Commerce Commission v. Goodrich Transit Co.*, 224 U. S. 194, 32 Sup. Ct. 436, 56 L. Ed. 729, and applied in many cases:

“The congress may not delegate its purely legislative power to a commission, but, having laid down the general rules of action under which a commission shall proceed, it may require of that Commission the application of such rules to particular situations and the investigation of facts with a view to making orders in a particular matter within the rules laid down by the Congress.”

#### **220—General Powers of Commissions.**

The applicants contended that prescribing rates for natural gas in West Virginia is an unlawful regulation of interstate commerce in that a common distribution system serves customers in three states, West Virginia, Ohio and Pennsylvania.

“But this interflow of gas from one state to another according to the pressure from the main gas pipes as common reservoirs cannot affect the power of the state of West Virginia to make reasonable regulations as to rates for gas furnished to its own citizens. *West v. Kansas Gas Co.* 221 U. S. 229, 31 Sup. Ct. 564, 55 L. Ed. 716, 35 L. R. A. (N. S.) 1193, relied on by the complainants has no application, for in the present case no effort is made to prevent the transportation and sale of natural gas from West Virginia into other states. It is not necessary to decide whether the Congress may not regulate charges for natural gas under such conditions, and under the well-known rule the court should not anticipate that question. In the present state of law, the Congress having taken no action, it was clearly within the power of the state legislature to provide for the protection of its own citizens against excessive charges. If it be assumed that interstate commerce will be incidentally affected, yet the

regulation of the local charges of a natural gas company as a public service corporation is within the police power of the state until the Congress sees fit to act. The recent and full review of the subject by the Supreme Court in the Minnesota Rate Cases, *Simpson v. Shepard*, 230 U. S. 352, 33 Sup. Ct. 729, 57 L. Ed. 1511, 48 L. R. A. (N. S.) 1151, leaves no room for discussion."

#### 240—Commission Procedure.

"The complainants contend with earnestness that they were denied due process of law in that: (1) Their leading counsel was required by the Commission to retire from the cause; and in that (2) the Governor of the state improperly interfered in the hearing, and the Commission acted in subservience to his will. If these charges be established, then the hearing was inadequate and manifestly unfair and it would be the imperative duty of the court to enjoin rates based on it. *Interstate Commerce Commission v. L. & N. R. R. Co.* 227 U. S. 88, 33 Sup. Ct. 185, 57 L. Ed. 431; *Interstate Commerce Commission v. Baird*, 194 U. S. 25, 24 Sup. Ct. 563, 48 L. Ed. 860."

The court held that the evidence does not show that the commission was improperly influenced by the Governor. The court also reviewed the proceedings before the commission which caused the withdrawal of the Company's Counsel. It appears that the counsel questioned the integrity of the Commission and that during the discussion one of the Commissioners requested that counsel withdraw from the case. However, the Chairman of the Commission speaking for the Commission requested the counsel to remain.

"We have set forth the proceedings with a detail, which may be justly criticised as excessive, because fairness and integrity of a Commission like this is of so great importance, not only to the commissioners themselves and the private interests concerned, but to the public that courts should examine charges of unfairness and lack of integrity with scrupulous care. The solemn responsibility of making such charges can only be justified by proof of them. Evidently they should be specific and supported by statements of the facts relied on, verified by a responsible person. The charges in this instance were mere conclusions of counsel, no facts were stated, and there was no verification. The Commission should have required verified allegations against its members or a withdrawal of the charge, as a condition of allowing counsel to proceed in the cause. The testimony offered entirely failed to sustain the imputation against the Commission."

After Counsel for the company withdrew the Commission proceeded with the hearings. Reports of the testimony were furnished the company, but no testimony was submitted by the companies. The court concludes as follows:

"Under these circumstances we think there was clearly ground for the Commission to hold that sufficient opportunity had been given to the gas companies to be heard, and to exercise the discretion to

close the hearing. It is to be borne in mind that it is not the province of this court to say whether the Commission exercised its discretion wisely, but to decide whether it acted so unreasonably and arbitrarily as to deny to the gas companies a fair opportunity to be heard. There was opportunity which was lost for the want of diligence and promptness. The gas companies took the chance of being sustained in their refusal to be represented before the Commission. We have shown they had no adequate reason for their refusal and the court can give them no relief for their default."

The court further holds that no evidence has been submitted sufficient to show that the rates prescribed by the Commission are unreasonable.

#### 244—Rehearings and Appeal.

"In invoking the interference of this court with the actions of the duly constituted state authorities the complainants assumed the burden of showing with reasonable certainty the invasion of rights affirmed or conferred by the Constitution or laws of the United States. The courts cannot set up views it might have reached of what ought to have been done, against the conclusions of the Commission which have a reasonable basis of support in the evidence. *San Diego Land Co. v. National City*, 174 U. S. 739, 19 Sup. Ct. 804, 43 L. Ed. 1154; *San Diego Land Co. v. Jasper*, 189 U. S. 439, 23 Sup. Ct. 571, 47 L. Ed. 892; *Ex parte Young*, 209 U. S. 123, 28 Sup. Ct. 441, 52 L. Ed. 714, 13 L. R. A. (N. S.) 932, 14 Ann. Cas. 764.

"Our conclusion is that the complainants have failed to make out a *prima facie* case of violation of any right guaranteed by the Constitution or statutes of the United States; and the application for a temporary injunction must be refused."

## REFERENCES RATES

#### 400—Rate Theory.

A RESUME AND COMPARISON OF RATE THEORIES, by STACY HAMILTON. *Journal of Electricity, Power and Gas*, 8½ pages, October 17, 1914, page 357 and Concluded in October 24, 1914, page 384.

The paper, extract from which was given in 5 RATE RESEARCH 371, is printed in full. A report of a part of the discussion on Mr. Hamilton's paper, before the Northwest Electric Light and Power Association is also given.

## PUBLIC SERVICE REGULATION

#### 200—Public Service Regulation—Law and Practice.

IS REGULATION FAILING? by H. G. D. NUTTING. 1½ pages *Electrical Review and Western Electrician*. October 24, 1914. p. 811.

The possibilities of success or failure of state regulation of public utilities is discussed. The danger that commissions will be hampered by incomplete laws and influenced by the pressure of public opinion is pointed out. The omission of the indeterminate permit provision from a public utility law hampers the commission and endangers the interests of the utilities. The danger from the pressure of public opinion appears to be increasing. At first the people were

willing to give the commission full sway because they believed they had at last discovered a way to show up the tremendous profits of the public service corporations. The early commissions did not regulate long before they found that these "tremendous profits" were fictitious. They fearlessly went ahead regulating, raising rates in some cases, and in some cases lowering them. In cases where they lowered them, the people were not satisfied because they had not lowered them enough, and in cases where they raised them, the people were loud in their criticism of the commission. On account of a natural fear of public opinion, commissions are inclined to favor the public in their decisions. If the people must have their way; if they required decisions to always favor them regardless of extenuating circumstances, state regulation will fail. If the people are willing to play fair and accept their commission's judgment as to whether rates should be raised or lowered and as to the justice of any rule or practice, state regulation will succeed. Immediately favorable decisions are not always ultimately beneficial. The public utilities in a city contribute more to the comfort of its people than any other feature. Consequently public utility companies should be fostered, not fought. Whether or not state regulation of public utilities fails will depend on the people themselves. Ultimately the people have the last word. If municipal regulation has failed, and if state regulation fails, what will be next?

### 222.1—Form of Accounts.

UNIFORM CLASSIFICATION OF ACCOUNTS FOR ELECTRIC UTILITIES. Tentative Issue by the OHIO PUBLIC UTILITIES COMMISSION.

The tentative classification of accounts for electric utilities is submitted to the companies for consideration, and conference will be held in the matter November 5, 1914. In making a classification of companies, each utility plant serving a distinct locality and separately operated, is considered a separate utility, even though two or more such plants are held in common ownership, so that the cost of rendering the service and the revenue derived therefrom may be determined for each distinct locality. Additional instructions are included for municipally owned and operated utilities. Three accounts are added for municipal plants: (1) free municipal service, credited at a fair rate for street lighting service, etc.; (2) city investment, an account which shall be raised as representing the investment of the municipality in the utility (exclusive of any outstanding bond issues) as if the city-owned utility had been financed like a private corporation; and (3) current transactions of municipal plants with the city, an account reflecting either the indebtedness to the utility from the municipality or from the utility to the municipality, according as the balance of the value of service (including interest on the investment) rendered free by the city to the utility or by the utility to the city are the greater. Whether any actual transfer of funds be made by the utility to the general funds of the city or not, the accounts as herein described will permit the making of such reports that the accounts of the municipally owned utility will be comparable with the accounts of a privately owned utility.

### 226.5—Standards of Service.

STANDARDS FOR GAS SERVICE IN THE WEST, by R. S. McBRIDE. 4 pages, *Journal of Electricity, Power, and Gas*, October 24, 1914. p. 375.

After a critical consideration of the several technical factors involved in setting standards for gas service, Mr. McBride, engineer with the U. S. Bureau of Standards, draws valuable conclusions as to the points of difference between the Eastern and Western practice and standards for gas service, particularly as regards heating value.

### 226.5—Standards of Service.

THE ELECTRIC BUREAU OF THE DEPARTMENT OF PUBLIC SERVICE, CITY OF CHICAGO. October 1, 1914, Pamphlet, 20 pages.

An account is given of the activities of the Electric Bureau during the months of July, August, and September. The report contains a copy of the proposed ordinance providing for the test, inspection, sealing, and adjustment of electric

meters, and also a copy of the tentative rules for electric service of the State Public Utility Commission of Illinois together with the changes which the Bureau considered necessary in order to make these rules adequate to meet the conditions in Chicago.

## **MUNICIPALITIES**

### **830—Public Ownership.**

**MUNICIPALLY OWNED UTILITY PLANTS IN THE STATE OF OHIO.** Investigation Made by Members of the Staff of the Public Service Publishing Company, September and October, 1914. Pamphlets, 28 and 27 pages, pp. 117 to 175.

A statement reporting the equipment, indebtedness, accounting practice, rates, etc., of each utility is given for a number of municipally owned utilities in Ohio. Similar pamphlets issued for June, July, and August were noted in 5 RATE RESEARCH 350.

### **840—Public Operation.**

**THE TORONTO HYDRO-ELECTRIC SYSTEM.** Third Annual Report of the Toronto Electric Commissioners, 1913. Pamphlet, 24 pages.

The report contains the revenue account, the balance sheet, and certain subsidiary statements of the Toronto Electric System showing the financial position of the enterprise. The last annual report of the Commission led consumers to expect a reduction in rates during the year 1914. This reduction cannot be made and the Commission states as one of the reasons for not making such reduction the heavy additional burden laid upon the utility by reason of the low prices at which the city of Toronto found it necessary to sell its debenture issues. The discount and expenses of the two issues amounted to a little over 20% of the amount of the net proceeds. That is to say, that each \$100 of cash invested in the plant has cost a little over \$120.

## **COURT DECISION REFERENCES.**

### **580—Terms and Conditions.**

**STATE et. al. v. KENOSHA HOME TELEPHONE COMPANY,** Action to Recover a Penalty For Failure to Furnish Plaintiff Telephone Service. Decision of the WISCONSIN SUPREME COURT, Holding that the Company's Rule Was Reasonable and Its Action Warranted. October 6, 1914. 148 Northwestern 877.

After the company had entered into contract with the plaintiff for telephone service, the company instituted a rule requiring its subscribers to pay all bills at its place of business and its previous practice of sending collectors was abandoned. The plaintiff refused to pay his account at the company's office and after repeated requests for payment were disregarded by plaintiff, the service was discontinued. The supreme court affirms the judgment of the lower court, holding that:

"The rule here made was reasonable in its nature, and no doubt productive of less confusion and mistakes, and tending to a more economical administration of the affairs of the company, and not unreasonably burdensome upon the subscribers. In *Magruder v. Cumberland Telephone & T. Co.*, 92 Miss. 716, 46 South 404, 16 L. R. A. (N. S.) 560, it was expressly held that the custom of a telephone company to send collectors may, upon sufficient notice, be abandoned, and the subscribers may be compelled to pay at the company's office. So also a rule requiring subscribers to pay within a reasonable time may be enforced, *Rushville Co.-Op. Tel. Co. v. Irvin*, 27 Ind. App. 62, 59 N. E. 327."

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# RATE RESEARCH



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120 WEST ADAMS STREET - - - CHICAGO

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# Rate Research

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CONTENTS	Page
COMMISSION DECISIONS	83
Illinois	83
Massachusetts	87
New Hampshire	89
REFERENCES	91
Rates	91
Investment and Return	92
Public Service Regulation	93
Municipalities	94
General	94
Court Decision References	95



# Rate Research

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Vol. 6

CHICAGO, NOVEMBER 5, 1914

No. 6

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### ILLINOIS

#### 720—Rate Schedules.

THE SPRINGFIELD GAS AND ELECTRIC COMPANY was authorized by the ILLINOIS PUBLIC UTILITIES COMMISSION to put in effect its rates issued as of December 1, 1913.

A comparison was made, in a number of representative instances, of the amounts of consumers' bills under the old and new rates. The Commission did not pass upon the reasonableness of the rates but based its order upon the reduction effected by the new rates, the form of the rate schedule, and the elimination of discrimination. These rates are to remain in effect until a new rate, based on a valuation of the property, is determined. The rates approved are as follows:

#### RESIDENCE LIGHTING RATES.

##### Rate.

10 cents net or 11 cents gross per kilowatt-hour for the first 30 hours' use per month of Active Load.

7 cents net or 8 cents gross per kilowatt-hour for the next 30 hours' use per month of Active Load.

3 cents net or 4 cents gross per kilowatt-hour for all current used in excess of above 60 hours' use per month of Active Load.

##### Determination of Active Connected Load.

The ratio of the active load to the connected load shall be predetermined as follows:

80 per cent of the first  $\frac{1}{2}$  kilowatt of connected load plus

60 per cent of that part of the connected load in excess of  $\frac{1}{2}$  kilowatt shall be deemed active.

The minimum active load shall be 150 watts.

In determining the connected load certain domestic appliances are excluded and others, such as electric stoves, combination cookers and disc stoves (over 500 watts), are counted at two-thirds their total known maximum capacity.

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EDITORIAL NOTE.—All indented matter is direct quotation.

**Prompt Payment Discount.**

Consumers will be billed at the gross rates, and the difference between the gross and net rates above specified, or 1 cent per kilowatt-hour, will constitute a discount for prompt payment if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

**Minimum Bill.**

90 cents net per consumer per month.

**COMMERCIAL LIGHTING RATES.****Rate.**

10 cents net or 11 cents gross per kilowatt-hour for the first 30 hours' use per month of active load.

7 cents net or 8 cents gross per kilowatt-hour for the next 30 hours' use per month of active load.

3 cents net or 4 cents gross per kilowatt-hour for all current used in excess of above 60 hours' use per month of active load.

**Determination of Active Connected Load.**

(See below.)

**Prompt Payment Discount.**

Consumers will be billed at the gross rate and the difference between the gross and net rates above specified, or 1 cent per kilowatt-hour will constitute a discount for prompt payment if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

**Minimum Bill.**

90 cents net per consumer per month.

**CONTRACT COMMERCIAL LIGHTING RATE.**

Under this schedule stores and commercial establishments of every character as classified hereinafter, will be billed, if they so select by contract, for lighting service as follows:

**Rate.****Demand Charge.**

\$2.50 net or \$2.78 gross per month per kilowatt of active load, plus an

**Energy Charge of**

3 cents net or  $3\frac{1}{2}$  cents gross per kilowatt-hour for the first 60 hours' use per month of active load.

2 cents net or 2.22 cents gross per kilowatt-hour for all current used in excess of above 60 hours' use per month of Active Load.

**Determination of Active Connected Load.**

(See below.)

**Prompt Payment Discount.**

Consumers will be billed at the gross rates, and the difference between the gross and net rates above specified will constitute a discount for prompt payment, if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

**Minimum Charge.**

90 cents per consumer per month.

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**Determination of Active Connected Load for Both Schedules for Commercial Lighting.**

Class A. Banks, offices, business and professional stores, etc. The following percentages of connected load shall be deemed active:

- 95% of the first 1 kilowatt of connected load.
- 90% of the next 2 kilowatts of connected load.
- 70% of all over 3 kilowatts of connected load.

Class B. Hotels, department stores and office buildings. The following percentages of connected load shall be deemed active:

- 95% of the first 1 kilowatt of connected load.
- 90% of the next 2 kilowatts of connected load.
- 70% of the next 7 kilowatts of connected load.
- 50% of the next 30 kilowatts of connected load.
- 40% of all over 40 kilowatts of connected load.

**Note.**—Office buildings are included in the above class when company sells service to the building as one consumer, through one or more meters, but does not furnish meters to or read meters of tenants. Stores on first floor are not included in this class.

Class C. Federal, state and city buildings, churches, etc. The following percentages of connected load shall be deemed active:

- 95% of the first 1 kilowatt of connected load.
- 90% of the next 2 kilowatts of connected load.
- 70% of the next 7 kilowatts of connected load.
- 50% of the next 20 kilowatts of connected load.
- 30% of all over 30 kilowatts of connected load.

**POWER RATES.**

For any A. C. Power Business.

**Rate.****Demand Charge.**

\$27.00 net or \$30.00 gross per active kilowatt per annum, payable in equal monthly installments, plus an

**Energy Charge of**

1 cent net or 1.11 cents gross per kilowatt-hour.

**Determination of Active Connected Load.**

- 90% of first 5 horse-power of connected load.
- 70% of next 5 horse-power of connected load.
- 50% of next 20 horse-power of connected load.
- 40% of all over 30 horse-power of connected load.

The above percentages shall apply to installations of one motor. When consumer's installation consists of 2 motors, the active load shall be considered as 10 per cent less than for installations of one motor of the same connected load. Where consumer's installation consists of 3 or more motors the active load shall be considered as 20 per cent less than for installations of one motor of the same connected load.

The minimum active load for installations of one motor shall be 50 per cent of connected load; for installations of 2 motors, 45 per cent of connected load; and for installations of 3 or more motors, 40 per cent of connected load.

**Prompt Payment Discount.**

Consumers will be billed at the gross rates, and the difference between the gross and net rates thus specified will constitute a discount for prompt payment if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

**POWER RATES.**

For any A. C. Power Business. Optional block rate for power

**Rate.**

- 9 cents net or 10 cents gross per kilowatt-hour for the first 50 kilowatt-hours per month.
- 7 cents net or 8 cents gross per kilowatt-hour for the next 50 kilowatt-hours per month.
- 5 cents net or 6 cents gross per kilowatt-hour for the next 50 kilowatt-hours per month.
- 3 cents net or 4 cents gross per kilowatt-hour for all current used in excess of above 150 kilowatt-hours per month.

**Determination of Active Connected Load.**

(Same as in first schedule for power.)

**Prompt Payment Discount.**

Consumers will be billed at the gross rates, and the difference between the gross and net rates above specified, or 1 cent per kilowatt-hour, will constitute a discount for prompt payment if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

**Minimum Bill.**

- 50 cents net per month per horse-power of active load.
- No bill shall be rendered for less than 90 cents per consumer per month.

**POWER RATES.**

For any A. C. Power Business. Contract demand rate for power.

**Rate.****Demand Charge.**

\$32.40 net or \$36.00 gross per kilowatt per annum, for the first 10 kilowatts of active load,

\$16.20 net or \$18.00 gross per kilowatt per annum, for all over 10 kilowatts of active load, payable in equal monthly installments, plus an

**Energy Charge of**

1.35 cents net or 1½ cents gross per kilowatt-hour.

**Determination of Active Connected Load.**

(Same as in first schedule for power.)

**Prompt Payment Discount.**

Consumers will be billed at the gross rates, and the difference between the gross and net rates above specified, or 10 per cent of the gross rates, will constitute a discount for prompt payment if bills are paid on or before the 10th day of the month succeeding that during which service was rendered.

The following schedules are in addition to those noted above: Theaters and Similar Amusement Places, Transient Lighting Business, Sign and Window Lighting, Battery Charging, D. C. Fan Service, D. C. Power Business, Transient Power Business.

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**MASSACHUSETTS****300—Investment and Return.**

EAST BOSTON PETITION, Asking that Gas Rates Be Reduced. Decision of the MASSACHUSETTS BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS, Recommending that the Reduction Be Made. July 17, 1913.

The complaint asks that the rate charged by the East Boston Gas Company for gas service in East Boston be reduced from 85 to 80 cents, the price charged in all other portions of Boston except Hyde Park.

The company serves East Boston and the city of Chelsea. At the time the East Boston company and the Chelsea company consolidated, the price for gas was reduced from \$1.00 to 90 cents and a later reduction established the present price of 85 cents.

The company makes in its own works about a third to a half of its gas and buys the remainder from the Boston Consolidated Gas Company. The gas produced in its own plant costs approximately 35 cents and 50 cents is paid for that purchased from the Boston Company. The Board finds that it is more economical for the company to purchase this gas than to build the extension to its plant which would be necessary in order for the East Boston Company to produce all its gas.

“As these figures indicate only the cost in the holder, a fair selling price must cover, in addition, the cost of maintenance, distribution and sale (including taxes), interest and dividend charges.”

**149.1—Stock Ownership.**

“Somewhat more than 98 per cent of the stock of the East Boston company is owned by the trustees of the unincorporated voluntary association known as the Massachusetts Gas Companies, which also has an even more complete ownership of the stock of the Boston Consolidated Gas Company; the latter supplies all the remaining portions of the city of Boston, excepting those commonly known as Charlestown and Hyde Park. This association also owns or controls the New England Gas and Coke Company, from which the Boston company buys substantially all its coal gas. The same persons virtually control and manage all of these companies. The profits of all these, as well as other allied companies, however derived, are pooled to meet the interest and dividend requirements of the association. These relations naturally direct attention to the reasonableness of the price for the gas bought and to the reasonableness of the dividends paid.

“Any attempt to reach a correct basis for a trade, when both parties to the transaction are virtually identical, must always be attended with serious difficulties. Theoretical refinements are likely to modify or obscure those motives which actual conditions would

be likely to induce in absolutely independent trading, entirely free from any community of interest. Some facts are thus given too great and others too little weight. Even outside parties may find it difficult to measure reliably the proper effect of all the theoretical factors which are assumed to be entitled to consideration when viewing the interest and legal relations of the parties, and to give to each and all of them the same force which parties might give who were strangers to each other or whose business judgment was entirely free. Particularly is this true where, as in this instance, the seller is itself a purchaser under like conditions. If the question of the reasonableness of the price of the gas bought be viewed as one merely concerning the immediate parties to the trade, it might be difficult to say conclusively whether the ability of the buyer to provide for himself or of the seller to sell should be most influential. It is not likely that in this case the former may have been the more important factor. While the price may be less than the figure at which the East Boston company could supply itself, it is by no means certain that a lower price would be unprofitable to the Boston company, notwithstanding the possibility of a higher profit from some other possible customer."

#### 300—Investment and Return.

"The questions involved, however, are distinctly broader than these suggestions would imply. Both the Boston and the East Boston companies are engaged in a public service and are affected with a public interest which each is bound to consider. Because of this the reasonableness of the entire return or profit which is received by the owners of the East Boston company's stock from all the transactions by or with that company becomes important. The profits from these relations reach the owners of this stock not only directly through the dividends paid, but hardly less directly though perhaps less obviously, from the sale of gas by the Boston to the East Boston company. It is, therefore, unnecessary for the purposes of this case to determine separately and conclusively the reasonableness of the price charged in any single transaction between the two companies or of the dividends received directly from the profits of the business of the company as a whole. It is the combined profit from all sources taken together which will determine the reasonableness of the return which the owners of the East Boston company receive."

#### 450—Value of Service Theory.

"It was urged by the petitioners that the value of the service in East Boston is no greater than in other sections of the same city where a lower price is now charged. Indeed, the characteristics of the population and the business of this district, as compared with those in certain other districts of the city, are so similar as to raise a question whether the difference in price may not be in effect discriminating against the East Boston section. Much emphasis was placed upon this proposition at the hearing."

The Board finds that a net price of 80 cents will afford a fair return upon the value of the property which it is actively and necessarily employing for the public convenience.

### NEW HAMPSHIRE

#### 149.1—Stock Ownership.

MANCHESTER TRACTION, LIGHT AND POWER COMPANY, Petition for Authority to Purchase Stock of the NASHUA LIGHT, HEAT AND POWER COMPANY, and to Issue Additional Stock. Decision of NEW HAMPSHIRE PUBLIC SERVICE COMMISSION, Granting the Application. June 23, 1914.

"The petitioner asks to be permitted to purchase the 6,000 shares of the capital stock of the Nashua company, giving in exchange therefor 6,000 shares of its own stock and \$40.00 in cash for each share purchased, or \$240,000 if the entire issue is obtained, the necessary cash to be obtained by an issue of stock to be allotted to its shareholders proportionately at par. The stock of the petitioner is now selling at \$140. But we have no hesitation in authorizing the new issue at par. The practice of issuing stock at various prices, according to temporary fluctuations in the stock market, has the effect of creating inequalities between the various classes of stockholders, produces injustice and confusion, makes more difficult the securing of new money needed for extensions and improvements, and is not required by any consideration of public interest. The consuming and investing public have the right to know that every dollar of stock represents a dollar of investment—precisely that, and nothing more. We have in no case required that stock be issued above its par value, and while contingencies might perhaps arise making such a course seem reasonable, we can at present think of no circumstances which would cause us to require it.

"Considering therefore the par value only of the stock of the Manchester company to be given in exchange for that of the Nashua company and to be issued to raise the funds for the cash payment provided for by the contract, the price to be paid for the entire capital stock of the Nashua company is \$840,000.

"We cannot find that the fair present value of all the property of the Nashua company equals the sum of \$840,000 and if the petition presented simply the case of a transfer of the Nashua company to another ownership, to be managed, as heretofore, as a separate operating unit, we would be constrained to deny the petition.

"But this case does not turn solely upon the value of the Nashua plant viewed as a distinct property.

"The statute (Laws of 1911, Chapter 164, Section 13 (c) ) forbids the acquisition by a public utility of the stock or bonds of a like utility 'unless authorized to do so by order of the Commission.' No test is suggested by which the Commission shall determine whether the requested authorization should be granted. As, however, the effect of control by stock ownership is substantially equivalent to that of control by a sale outright of the property and franchises of the controlled corporation, and the prohibition of the one is necessarily based upon the same considerations as the prohibition of the other, we can find in the statute relating to the transfer by one utility to another of all its property and franchises the test by which to determine whether such authorization as is here requested should be given. That statute (Laws of 1913, Chapter 145, Section 13 (b) ) provides that such transfer shall be made only by order of the Commission, and that 'the Commission shall make such order in any case where it shall appear that the proposed transfer, lease or contract would be for the public good and not otherwise.'

"The authorization of the stock transfer here proposed must therefore depend upon whether it is found to be 'for the public good.' It is clear that a purchase at a grossly excessive price, inevitably resulting in an undue burden upon the public in increased rates or impaired service and facilities, would not be for the public good. But it is also clear that where the discrepancy between the value and the price to be paid is not large, there may be benefits to the public from proposed changes in methods of operation sufficient to make up for the deficiency in value."

The joint operation of the two plants will tend to economy of operation and improvement of service in both communities, and a reduction will be provided for in the cost of electric lighting in Nashua. The Commission finds that the Manchester Company can well afford to pay the price agreed upon for the stock of the Nashua Company and that the proposed consolidation will be for the public good.

#### **310—Valuation.**

A valuation was made of the property of the Nashua Company in order to determine the reasonableness of the terms of the contract.

#### **314—Overhead Charges.**

The Commission found that an allowance of 15 per cent for overhead charges was reasonable.

"And as stated in the Berlin Electric Light Company case (4 RATE RESEARCH 67), decided August 30, 1913, we are clearly of the opinion that the overhead charges, being theoretically a part of the actual cost of construction which would have to be met if the plant were reduplicated, should be depreciated in like manner as the physical properties in connection with whose construction they are incurred.



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**315.1—Going Value.**

"A plant should normally earn enough to pay fair dividends and to make good its depreciation. If no provision can be made for depreciation out of earnings for a considerable period, the amount represented by the depreciation is something to which the company is entitled but which it has foregone, and fairly represents the cost of developing the business. But when the company has paid ample and, judged by the standard of a fair return, excessive dividends, and has more than made good its depreciation out of earnings, as in the present case, there has been no cost of developing the business at the expense of the stockholders. It has paid for its own development. The situation is similar to that in the *People's Gas Light Company* case, and, for the reasons stated in our report in that case, we see no occasion for attempting to make here a separate assessment of going concern value."

## REFERENCES

### RATES

**410—Cost of Service.**

**COST OF DISTRIBUTION AND OVERHEAD CHARGES**, by E. A. WRIGHT. Read before the Kansas Gas, Water, Electric Light and Street Railway Association, Arkansas City, Kansas. October 22-24, 1914.

The purpose of this paper is to discuss the operating expenses and fixed charges in their relation to the cost of the various classes of service. Using the data of the Manhattan Ice, Light and Power Company for the year ending June 30, 1914, an apportionment of costs is made to determine the cost of residence lighting, business lighting, municipal street lighting and commercial power. For this calculation, operating expenses and fixed charges were classified into (1) those that can be apportioned on a connection or meter basis, (2) those which should be apportioned according to the investment, and (3) those which are wholly chargeable to any particular class of service.

**616.1—Street Lighting.**

**STREET ARC LIGHTING PRICES**, by M. HARRY HOLZ. Read before the Nineteenth Annual Convention of the International Association of Municipal Electricians, at Atlantic City, September 15-18, 1914.

Data is given and comparisons are made of the various prices paid by several cities for street arc lighting.

## INVESTMENT AND RETURN

### 311.3—Present Value.

PRESENT VALUE OF PUBLIC UTILITY PROPERTY, by W. G. VINCENT, JR.,  $4\frac{1}{2}$  pages, *Journal of Electricity, Power and Gas*, October 31, 1914, p. 403.

The methods of determining the present value of public utility property are discussed and illustrations are given of present value as determined by probable life and age and as determined by condition. The article says: Where present value is desired the most accurate results will be obtained by a combination of the "Observed" and "Sinking Fund" methods, applying to each item or group of items, the method which suggests itself as best adapted to give the fairest results in each case. It is only necessary to consider some of the classes of property which comprise a public utility to realize the limitations of either the observed or the average age method applied consistently to the whole property, and the result is that most appraisers make use of a combination of the two methods to arrive at a general result which they consider to be reasonable. The tendency is, however, to rely too much upon the average age method, as this method is apparently more accurate, inasmuch as it eliminates to a large degree the personal equation, and this tendency results in an application of the average age theory of depreciation in a great many classes of property where the age has absolutely no relation to depreciation. It should be borne in mind in applying either method that the average age method can only be used in determining that element of depreciation which is due to wear and tear, action of the elements and ravages of time and should in no sense be employed as a measure of the other elements in depreciation, such as obsolescence and inadequacy. Consideration should, of course, be given to obsolescence, inadequacy, etc., in determining present value, but the proper deduction which should be made on account of these elements of depreciation is entirely a question of efficiency and the functional relation of the equipment to the service which it is expected to supply.

### 361.5—Electrolysis.

ELECTROLYSIS IN CONCRETE, Technological Papers of the BUREAU OF STANDARDS. No. 18. March 9, 1913.

During the past few years attention has been called to the possibility of damage to reinforced-concrete structures by stray currents from electric railways and other power sources. The paper reports a number of investigations relating to the nature and cause of such electrolytic damage, the possibilities of trouble from electrolysis in concrete structures under practical conditions and the protective measures employed to prevent or lessen the electrolysis damage.

### 361.5—Electrolysis.

SURFACE INSULATION OF PIPES AS A MEANS OF PREVENTING ELECTROLYSIS. Technologic Papers of the BUREAU OF STANDARDS. No. 15, January 5, 1914.

One of the first methods resorted to as a possible means of preventing damage to buried water pipes and gas pipes by electrolysis was the covering of the surface of the pipes with a coating intended to insulate them from the surrounding earth. The paper reports various tests to determine the success to be obtained by different materials used as coatings for this purpose.

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**PUBLIC SERVICE REGULATION****200—Public Service Regulation—Law and Practice.**

SOME ASPECTS OF THE WORK OF THE ILLINOIS UTILITIES COMMISSION, by ROBERT M. FEUSTEL. Read before the Western Society of Engineers, Chicago, October 19, 1914.

Mr. Feustel, chief engineer of the Illinois Commission, gave a general account of the work of the Commission and its proper relation to the utilities and the public. The work of the service department was given more importance than rate regulation. It is more important and to the best interests of the public that progress in the industries be maintained by service inspection and regulation requiring improvement in service conditions than that the companies be restricted to the lowest possible return on investment. Another important service rendered by the Commission is performed in response to informal complaints. The Commission acts as a central clearing house between the utility and the consumer, promoting a better understanding between the utility and the public.

The discussion following the paper commented on the incompleteness of the Illinois law in that no regulation was provided for municipal plants. The indeterminate permit feature is omitted from the law while the law is more exacting in certain respects and harder to administer than similar laws in other states.

The Illinois Commission does not think that blanket orders for valuations from all the companies would result in anything but great expense to the companies, great trouble in filing the valuations on the part of the Commission, and practically a renewal of all the work any time a rate case might come up after two or three years. The Commission, however, will require of the utility a complete valuation of its property at the time any investigation, involving a valuation, is made. The Commission is preparing a form for valuations and it is the plan to have valuations, submitted by all parties to an investigation, prepared in this form in order to facilitate the comparison and checking of such data.

**200—Public Service Regulation—Law and Practice.**

THE CONTROL AND REGULATION OF PUBLIC UTILITIES, by T. J. STRICKLER. Read before the Kansas Gas, Water, Electric Light and Street Railway Association, Arkansas City, Kansas, October 22-24, 1914.

Mr. Strickler, Engineer of the Kansas Public Utilities Commission, discusses, in a general way, the regulation of public service companies. A few of his remarks on the subject follow. To obtain the best results—results that will be to the permanent benefit of both the public and the utilities themselves, we must have commissions composed of business men with a business organization; unprejudiced men with judicial minds who are capable of careful analysis of facts and have a certain inherent ability to separate the wheat from the chaff. Behind these men must be an organization of engineers, scientists and economists who are capable of approaching these various problems with fair and open minds in exactly the same manner as they would in a matter of scientific research. The ultimate success of regulation can only be attained by the hearty co-operation of both the public and the utilities. The public must realize that honest investments must be protected else our future growth will be seriously affected by the lack of that money, which is so necessary to the healthy progress of any community. On the other hand the directors of the policies of the public utilities must realize that they must be open and honest with the commissions and the public. The habit of mental reservation must be eradicated, for no permanent good is accomplished as long as there is distrust in the atmosphere. I am a firm believer in publicity, both in the actions of the commissions and in the conduct of the business of the

public utilities. The public must be taken into our confidence. It is due to the public utility business itself as well as to the regulating commission that public sentiment be made an asset. It has been the case too often in the past that it has become a heavy liability and one that cannot be ignored.

### **227—Valuation.**

STATE ex rel. WINNETT ET AL V. OMAHA & C. B. ST. R. Co. Decision of the SUPREME COURT OF NEBRASKA. September 26, 1914. 148 Northwestern 946.

The State Railway Commission applied to the court for a writ of mandamus to compel the Omaha & Council Bluffs Street Railway Company to forthwith file with that body a detailed inventory of its property under the provisions of sections 26-30, art. 8, c. 72, Comp. St. 1911, commonly known as the "Physical Valuation Act." The court held that the words railroad and railway as used in the physical valuation act did not include street railways and street railways are not included among the utilities enumerated under the term "public service corporation."

"Where the Legislature has, upon the effort being made therein refused to include certain classes of public service corporations in a physical valuation statute, the court will not include them therein by construction."

## **MUNICIPALITIES**

### **830—Public Ownership.**

CLEVELAND'S NEW MUNICIPAL LIGHTING PLANT'S OPERATING COSTS HIGH? *Electrical Review and Western Electrician*. October 31, 1914. p. 867.

That the cost of producing current at the new East Fifty-third Street plant of the Cleveland municipal lighting department is unexpectedly high, for reasons which have not yet become clear, appeared last week when it was admitted by the engineers in charge of the plant that the cost per kilowatt-hour at the new plant was 2.6 cents, whereas it was anticipated before the plant went into operation that the cost would be below 0.69 cent. In August, according to Mr. Ballard's figures, the cost of producing current at the new plant was 3.3 cents, but as this was the first full month of its operation no better showing was expected. When the figures for September dropped no lower than 2.6 cents, however, there was felt to be room for some worry, as the current is sold for three cents, and the margin is not profitable, in view of the fact that the plant cost over \$2,000,000.

## **GENERAL**

### **900—General.**

WOULD MAKE RAILROAD RATES POLITICAL ISSUE. *Weber's Weekly*, October 31, 1914.

The agitation caused by political leaders who drag business into politics to make it the football of the game in which they expect to profit and score, enhances the cost of railroad capital, depreciates the value of railroad securities and impairs railroad efficiency.

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**COURT DECISION REFERENCES.****115—Use of Public Highways.**

**BOLENDER V. SOUTHERN MICHIGAN TELEPHONE CO.** Decision of MICHIGAN SUPREME COURT. October 2, 1914. 148 Northwestern 697.

Under How. Ann. St. 1912, Sec. 2345, regulating the planting of trees along the sides of public highways, section 2346, authorizing the highway commissioner to set out shade trees and expend a share of the public moneys for that purpose, and sections 2348 and 7214, authorizing telephone companies to construct their lines along public highways, but providing that they shall not injuriously interfere with other public uses of the highways or injure or destroy any tree or shrub, a telephone company has no right to injure, cut down, or destroy any shade tree planted upon the side of a highway, and if it does, it is liable in damages to the owner of the fee.

**120—Protection of the Public.**

**MINNESOTA, D. & P. RY. CO. V. WAY ET AL.** Decision of SOUTH DAKOTA SUPREME COURT. October 6, 1914. 148 Northwestern 858.

A railroad company is bound to locate such stations and depots as will best serve the public interests, rather than the speculative interests of its officers and stockholders.

**223—Reports.**

**NASHVILLE, C. & ST. L. RY. CO. V. COMMONWEALTH.** Decision of the KENTUCKY COURT OF APPEALS. October 2, 1914. 169 Southwestern 511.

The Kentucky statute, section 4077, imposes a franchise tax on certain corporations, including railroads, and in order to determine the value of the franchises, section 4078 requires annual reports to be made and filed by the corporations with the auditor of public accounts, prior to October 1st of each year. The latter section also declares that any corporation or officer thereof, willfully failing or refusing to make reports as required by the chapter, shall be guilty of a misdemeanor, and for each offense shall be fined, etc. The court holds that the word, "willfully" as used in section 4078, means merely the voluntary act of a party as distinguished from coercion; and, hence where defendant railroad company failed to file its report before October 1, 1912, it was liable to conviction under the act, though its breach resulted from a failure to receive a blank on which to make the report from the auditor's office, which it had been in the habit of using in previous years.

**781—Adequacy.**

**DELAWARE, L. & W. R. CO. V. VAN SANTWOOD ET AL., PUBLIC SERVICE COMMISSION OF SECOND DISTRICT OF NEW YORK.** Decision of DISTRICT COURT, N. D. NEW YORK. July 14, 1914. 216 Federal 252.

The railroad company discontinued two trains a day each way, running between Oswego and Syracuse, and was ordered by the New York Commission, Second

District, to restore the service. The court held that the right of the Commission to order the train restored depended on whether the convenience and necessity of the public served demanded the restoration of the service although it involved operation at a loss. Decree for the company.

"What is reasonable and what is reasonably necessary is not to be determined by the occasional wants and wishes and convenience of a very few people living at points along the line. It seems to me that when steam trains enough are run between the city of Oswego and the city of Syracuse to accommodate and serve the necessities of the people of those cities and the intervening city of Fulton, and two steam trains per day each way are run which reasonably serve the convenience and supply the reasonable necessities of the four small intervening points, and these people also have the convenience of the trolley line as described, the complainant has performed its whole duty to the public, and that to compel the running of the two additional trains between these points at a net loss of over \$3,000 per annum, is unjust and unreasonable and in violation of the constitutional rights of the complainant."

### 830—Public Ownership.

CITY OF OMAHA V. DOUGLAS COUNTY. Decision of the SUPREME COURT OF NEBRASKA. September 26, 1914. 148 Northwestern 938.

A part of the property belonging to the city's waterworks system lies outside the city, and the question arises as to whether or not the city can be required to pay taxes on the part of its property outside its limits.

"The city of Omaha was required to purchase the entire property from the Omaha Water Company, which had been serving the community of which Omaha is a part, and whether lying within the limits of Omaha or in any part outside of such limits. City of Omaha v. Omaha Water Company, 218, U. S. 180, 30 Sup. Ct. 615, 54 L. Ed. 991, 48 L. R. A. (N. S.) 1084. The city of Omaha was the undisputed owner of the property of said water plant; a part being located in the city of Florence; a part in school district No. 5, Douglas County; a part in East Omaha and a part in the precinct of Benson; a part in the village of Dundee and a part in the city of South Omaha; a part in school district of South Omaha and the remainder in the city of Omaha. . . . The board of equalization exempted that part of said property within the city limits of Omaha, but burdened the balance of it with taxation. . . . All the property involved in the assessment is property used in connection with the city's plant. . . . Under the constitution of this state rightful ownership of property by municipal corporation such as the city of Omaha is all that is required or necessary to extend to such property complete exemption and immunity from assessment and taxation, whether located within the city or without. Section 2, Art. 9 of the Constitution, Rev. St. 1913, Sections 4402, 6301."

### 831.1—Municipal Bond Issues.

HERBERT V. GRIFFITH, MAYOR et al. Decision of SOUTH CAROLINA SUPREME COURT. September 22, 1914. 82 Southeastern 986.

The court held that under Civ. Code 1912, Sec. 3050, providing for special elections on the issuance of municipal bonds for "waterworks or sewerage," petitions and ballots for an election on the issuance of bonds for waterworks and sewerage invalidated the election, where they contained no separate statement of the amount to be expended for each. It was contended that the two systems are one and inseparable.

"But respondents cannot indissolubly unite by allegation or proof, things which in their nature and by legislative enactment have been made separate. The intention of the Legislature with regard to the matter has been declared by the court, and effect must be given that intention, until a different intention is expressed by the Legislature itself."

Vol. 6

November 12, 1914

No. 7

# RATE RESEARCH



PUBLISHED BY THE  
**RATE RESEARCH COMMITTEE**  
OF THE  
**NATIONAL ELECTRIC LIGHT ASSOCIATION**  
120 WEST ADAMS STREET ~ ~ ~ CHICAGO

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120 WEST ADAMS STREET - CHICAGO, ILL.

# Rate Research

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CONTENTS	Page
ANNUAL REPORT.....	99
Pasadena, California.....	99
COMMISSION DECISIONS.....	101
Arizona.....	101
Connecticut.....	105, 108
California.....	108
REFERENCES.....	109
Investment and Return.....	109
General.....	111
Court Decision References.....	112



# Rate Research

Vol. 6

CHICAGO, NOVEMBER 12, 1914

No. 7

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## ANNUAL REPORT PASADENA, CALIFORNIA

### 840—Public Operation.

SEVENTH ANNUAL REPORT OF PASADENA'S MUNICIPAL LIGHTING WORKS DEPARTMENT, 1913-1914. Pamphlet, 30 pages.

The following information is taken from the report of the municipal lighting works department for the year ending June 30, 1914.

### 315—Intangibles.

Under the heading "Intangible Values," the report says:

"I wish to call attention to the fact that the property has certain intangible values that have not been added. All engineering and supervision has been charged direct to operation. The cost of building up the business, advertising, soliciting, competition with a strong competitor, has all been charged to operation.

### 360—Depreciation.

The following table is given showing the rate of depreciation used in allowing for depreciation of the plant:

Property.	Allowance in Pasadena.
Are Lamps.....	8½
Boilers.....	4
Cables, Underground: (High Tension).....	5
Condensers.....	4
Conduits.....	2½
Cross Arms.....	5
Engines.....	4
Foundations for Machinery.....	Same as life of apparatus supported.
Fuel Oil Handling Machinery.....	4
Generators, Electric.....	4
Steam Turbo.....	4
Heaters.....	4

EDITORIAL NOTE.—All indented matter is direct quotation.

(Table cont'd)

<b>Property.</b>	<b>Allowance in Pasadena.</b>
<b>Meters:</b>	
(Electric Switchboard).....	4
(Electric Service).....	4
Piping and Covering.....	4
Poles: (Steel).....	6.4
Pumps.....	4
Switchboard and Wiring.....	4
Transformers.....	4
Wire.....	2
(Copper wire has high salvage value.)	
<b>Horses and Wagons:</b>	
(Electric Auto Trucks).....	10
(Gasoline Auto Trucks).....	20
Buildings.....	2

**720—Rate Schedules.**

The rates charged by the municipal plant are as follows:

**INCANDESCENT LIGHTING.****Rate.**

- 5 cents per kilowatt-hour for the first 100 kilowatt-hours or less of energy consumed per month.
- 4½ cents per kilowatt-hour for 101 to and including 500 kilowatt-hours of energy consumed per month.
- 4 cents per kilowatt-hour for 501 to and including 1,000 kilowatt-hours of energy consumed per month.
- 3½ cents per kilowatt-hour for 1,001 to and including 2,000 kilowatt-hours of energy consumed per month.
- 3 cents per kilowatt-hour for all excess over 2,000 kilowatt-hours of energy consumed per month.

**Minimum Charge.**

A minimum monthly charge of 50 cents per meter of three kilowatt capacity or less, and 30 cents for each additional kilowatt of meter capacity required, shall be made for each meter.

**Lamp Renewals.**

Carbon and Gem lamps of such candle power as the Department can conveniently carry shall be furnished free for renewal purposes to all consumers.

**ARC LIGHTING.****Rate.**

- 4.9 cents per kilowatt-hour for the first 100 kilowatt-hours or less of energy consumed per month.
- 4½ cents per kilowatt-hour for 101 to and including 500 kilowatt-hours of energy consumed per month.
- 4 cents per kilowatt-hour for all excess over 500 kilowatt-hours of energy consumed per month.

**Minimum Charge.**

A minimum monthly charge of 50 cents per meter of three kilowatt capacity, or less, and 30 cents for each additional kilowatt of meter capacity required, shall be made for each meter.

**POWER RATES.**

Schedule of Rates for Electric Energy for Power, Heating or Purposes Other Than Lighting.

**Rate.**

- 4 cents per kilowatt-hour for the first 100 kilowatt-hours of energy or less consumed per month.
- 2.4 cents per kilowatt-hour for 101 to and including 300 kilowatt-hours of energy consumed per month.
- 2.4 cents per kilowatt-hour for 301 to and including 500 kilowatt-hours of energy consumed per month.
- 2 cents per kilowatt-hour for 501 to and including 1,000 kilowatt-hours of energy consumed per month.
- 2 cents per kilowatt-hour for 1,001 to and including 1,500 kilowatt-hours of energy consumed per month.
- 1.9 cents per kilowatt-hour for 1,501 to and including 2,000 kilowatt-hours of energy consumed per month.
- 1.8 cents per kilowatt-hour for 2,001 to and including 3,000 kilowatt-hours of energy consumed per month.
- 1.2 cents per kilowatt-hour for all in excess of 3,000 kilowatt-hours of energy consumed per month.

**Minimum Charge.**

A monthly minimum charge will be collected for electrical energy of \$1.00 per meter of  $1\frac{1}{2}$  kilowatt capacity or less and \$0.75 for each additional kilowatt of meter capacity required.

**STREET LIGHTING RATES.****Rate.**

- \$60.00 per annum for 6.6 ampere Arc Lamps.
- 12.00 per annum for 6.6 ampere 40 c. p. Tungstens.
- 12.00 per annum for 6.6 ampere 80 c. p. Tungstens.
- 48.00 per annum for 6.6 ampere 200 c. p. Tungstens.
- 60.00 per annum for 6.6 ampere 350 c. p. Tungstens.
- Cluster posts 3 cents to 4.3 cents per K. W. H.

**COMMISSION DECISIONS****ARIZONA****300—Investment and Return.**

G. W. M. CARVEL ET AL. V. GLOBE LIGHT & POWER COMPANY, Alleging that the Rates for Gas and Electricity are Unreasonable. Decision of the ARIZONA CORPORATION COMMISSION, Fixing the Rates. July 1, 1914.

A valuation was made of the gas and electric properties and detailed reports were given relative to allowances for tangible and intangible

assets of the company, the present condition of the property and operating revenues and expenses.

#### **314—Overhead Charges.**

"We have carefully reviewed the evidence and engineering recommendations as to the amount properly to be added to the inventory valuation for the intangible and overhead values and have given particular consideration to all testimony that was developed regarding conditions, financial and physical, which existed during the earlier period of the growth of this plant.

"We find no condition not usually present in the development of other Arizona mining camps. We believe the system, now the property of the Globe Light & Power Co., to have grown from a small unit, with alternate periods of prosperity and depression, and we predicate such belief on the curves of the plant operation plotted over the period for which records are available. We believe that the effect of any unsettled conditions arising from uncertainty in mining operations, should appear in the allowable rate of return, as reflecting back the effect of such conditions on the local rate of interest.

"We have included an allowance in addition to the inventory valuation for the various overheads as follows:

Engineering and Supervision.....	5%	of Depreciable Property.
Interest during Construction.....	4%	of Depreciable Property.
Contingencies, Legal Expense, Omissions, etc.....	3%	of Depreciable Property.
Total.....	12%	

These figures are to apply to both the Gas and Electrical properties."

#### **314.44—Contractor's Profit.**

"The report of the Respondent Company contains the item of 'Contractors' Profits.' We believe that the admission by the Respondent, that the prices are figured on a piece-meal basis effectually disposes of contractors' profits as an element in the valuation. No work could consistently be figured by a contractor in such a way as to include a profit in addition to the cost of such work performed on a piece-meal basis, assuming that proper overheads were added. On the contrary, he would of necessity handle labor and material so advantageously that the total would not exceed the piece-meal cost, and the higher unit prices in piece-meal construction may, therefore, be said to include the contractors' profits."

#### **315—Going Value.**

"We have given consideration to 'Going Value' as an element of value for rate making. The Auditor's report shows a deficit of \$44,425.75 in the Gas Department, by the Historical method of valuation, a method of accruing deficits and surpluses at current

percentage for interest and depreciation. The Electric Department on the other hand, has, by the same process, earned an accrued surplus of \$26,148. This calculation, however, dating from the reorganization of the Company, includes only the later years of the Electric Department's life, while practically the entire life of the Gas plant is thereby included. The expenses of establishing a system as a going concern are likely to be met entirely during the earlier period of the system's existence, and of these expenses we have no record in the accounts. We assume that to reproduce a similar property, under conditions analogous to those under which the system of the Respondent was developed, would require an expenditure comparable in amount to that required to place a like system elsewhere on a going basis. We are of the opinion that a reproduction basis, rather than a consideration of the accounts of the Company, should be the determining feature in arriving at a fair and just allowance for Going Value in this case, and have given weight, therefore, to the reproduction basis in arriving at a just and fair Going Value to be considered in the valuation for rates of the Gas and Electric Departments, as operated by the Respondent."

Ten per cent was allowed for going value in the valuation for rate making for the electric department.

**318—Working Capital.**

An allowance of  $13\frac{1}{2}$  per cent of the gross income of the electrical department was made for working capital.

**340—Rate of Return.**

"The Commission has reviewed all evidence touching upon this element of rate of return, and has taken into consideration the hazards and peculiar characteristics manifest in the district served, and are of the opinion that a reasonable rate of return as exemplified in the local situation should not at this time be less than 10 per cent. This percentage has been given consideration in arriving at what should be applied to the valuation for rate making purposes."

**360—Depreciation.**

"The Depreciation allowed in this case is calculated on a straight line basis, from a consideration of the estimated life of each individual item of equipment. In arriving at the estimated life of the various items, figures commonly accepted by engineers were used as a basis, these figures being modified as the conditions of the particular cases demanded."

Four per cent of the depreciable property was allowed for the electric property and  $3\frac{1}{2}$  per cent for gas.

**366—Depreciation Funds.**

"The Depreciation Reserve shall be treated as a separate account and shall not be distributed or disposed of, except in accordance with the rules provided in the Uniform Classification of Accounts for Electric and Gas Corporations, heretofore issued by this Com-

mission, wherein the disposal of and proper charges to a depreciation fund are defined."

**540—Minimum Charge.**

"Practically all of the fair and equitable rates, established by Commissions, have given consideration to these general charges, and we shall not make any detailed analysis of such charges, or the principles involved therein.

"It is apparent that the Respondent is compelled to undertake many expenses that it may serve its various classes of consumers regardless of whether any individual consumer in such classes may, during any particular time, use none of the commodity, or varying quantities thereof. Such expense is carried by those non-using consumers and should not be placed upon the other consumers who are taking the service and who must make up the Operating Expenses, giving the Respondent a fair return on its investment over and above all legitimate operating expenses."

**580—Terms and Conditions.**

"Particular attention was directed to the amount of deposits on hand, as held by the Respondent, such deposits representing consumers' money deposited by them, before service was rendered, guaranteeing prompt payment and settlement of bills rendered to cover consumers' consumption. It was claimed by the Respondent that such deposits should remain in force and effect and that consumers, not property owners, should be required to make deposits.

"It is our opinion that such is the most practicable method of securing prompt payment of accounts, and is entirely equitable, in that provision for the payment of interest, on guarantee deposits, at eight per cent per annum to consumers, is required of all water, electric and gas companies, by a general order of this Commission."

In regard to reconnection charges the Commission says:

"Certain expenses are occasioned on account of discontinuing electric and gas service, in certain instances, to facilitate the payment of bills and should be borne by the person causing same. This character of expense is the direct outgrowth of the individual consumers causing the same and should be assessed accordingly. The average cost of this item of expense approximates \$1.00 in each case and, on the basis of apportioning costs, this Commission believes that \$1.00 should be charged by the Respondent against such consumer occasioning discontinuance of service by reason of non-payment of bills and applying for and receiving resumption of service."

The rate schedule provided in the order contains the condition that all bills are due and payable on or before the 20th day of the month following the month for which service was rendered; and that service will not be discontinued until after a second notice has been mailed and a third notice given, advising the consumer that service will be

discontinued within five days after third notice, if a satisfactory adjustment has not been made between the consumer and the Company, and that a charge of \$1.00 will be made for each cut-in for non-payment of bills.

**620—Factors Affecting Rates.**

“The methods to be followed in determining a proper rate for electrical energy, are necessarily different from those in making a rate for any other commodity, due, in part, to certain characteristic features in its generation and distribution, and, in part to the peculiarities inherent in the commodity itself. The effect is to make the cost of a unit of energy dependent upon leading conditions and upon the nature of the service, with the result that the compilation of a balanced and consistent rate entails a careful engineering and accounting analysis of the condition surrounding each individual case.”

**720—Rate Schedules.**

The rate schedule ordered is a step meter rate charging 15 cents for the first 100 kilowatt hours. The company's schedule was in this form and the Commission simply reduced and modified the rates.

**CONNECTICUT****300—Investment and Return.**

Petition of McMURRAY ET AL for a Reduction in the Rates of the BRIDGEPORT GAS LIGHT COMPANY. Decision of the CONNECTICUT PUBLIC UTILITIES COMMISSION, Denying the Petition. July 13, 1914.

The company submitted a valuation of its properties based on cost of reproduction new less depreciation. The Commission excluded from the company's figures the cost of paving over mains where such costs were not actually incurred by the company and excluded the allowance for cost of organization and certain other items which were considered excessive. The present value of the company's property was held to be approximately \$3,000,000.

**315.1—Going Value.**

“It is contended by counsel for respondent that an additional allowance should be made to cover this item [going concern value] before a figure can be reached which will represent the full present value of the company's property. The Commission admits that the company is entitled to a return upon a valuation which takes into account that it is a live organization actually supplying customers and so of more value to its owners than it would be if idle or just constructed and ready to solicit business, but not actually in full

operation. We do not hold, however, that to the full cost to reproduce new, less depreciation, any addition should be made for value inherent in the physical property because the company is actually in successful operation. It would seem that by crediting the company with practically the full cost-to-reproduce-new-less-depreciation value, based on the engineers' report, we are already appraising the property as that of a going concern. On any other theory the allowance is too high, for if the company could be conceived of as owning all its present property but non-operating and non-productive, then the actual value of the tangible property to its owners would be but a fraction of what it would cost to reproduce new. While we can see no reason for adding to the appraisers' figures for physical valuation anything more because the company is a going concern, we could conceive of the necessity for subtracting a "going concern value" from the cost to reproduce new in case the company were no longer successful and an appraisal were necessary in foreclosure proceedings, for instance.

"The question of going concern value is, however, broader than indicated by the foregoing discussion. It involves the cost of reproduction of the business of the company, while we have heretofore considered merely the cost of reproducing the company's physical property.

"The courts have very uniformly held of late that even in rate cases, consideration of such costs should be given in arriving at the figure upon which utility companies are entitled to earn a return. One of the most elaborate discussions of this question appears in the recent case of the Kings County Lighting Company v. New York Public Service Commission for the First District. . . . [5 RATE RESEARCH 19.]

"It cannot be said arbitrarily that any given percentage on the valuation of the tangible property should, in all cases, be allowed but the whole past history of the company must be examined to discover where there actually is any net unrequited cost of developing the business which should now be capitalized in order that the company may secure a fair return. In some cases this might amount to as high as 30 per cent of the structural cost, as in one instance cited by the respondent. In others it might amount to nothing. We must consider the facts in each case by themselves." . . .

The Commission concludes that the value of the original investment has been unimpaired, according to the valuation allowed by the Commission, and that a fair return has been received since the beginning. It is held that under these conditions no allowance need be made for "going value" under the definition laid down by the court in the Kings County case.

#### **340—Rate of Return.**

"The courts have defined in some detail the characteristics of a confiscatory rate, so that the problem presented to the Commission



affords but few difficulties from that aspect. In other words, it is comparatively easy on the basis of the legal principles laid down by the courts, when applied to the figures accepted by the Commission in this case, to compute with some certainty what rate would be sustained. This is not saying, however, that it would be unreasonable for the company to charge in the first place a rate higher than such minimum rate. It rests in the discretion and judgment of the Commission, after considering all the facts, to declare whether or not an existing rate is so much higher than the minimum rate which the courts would require, as to be unreasonable, and if so, what intermediate rate it would be reasonable for the company to charge. . . .

"Assuming that a rate allowing a net return of \$150,000, of 5 per cent., on the value of the company's property, is the lowest rate that could be decreed in this case, without being subject to reversal on the ground of confiscation, the Commission believes that better and more satisfactory service can be furnished the public if the company has a larger margin of profit, so that necessary capital can be procured when needed for extensions and improvements.

"While there is more or less uniformity as to what is the minimum rate that can be allowed without being subject to the charge of confiscation, there is less definiteness as to what should be or may be a maximum rate of return. The greater the hazard, the greater the rate of return allowable in order to attract necessary capital and give reasonable security to the investors. The risk and stability of the business conducted by the different public service companies vary according to the particular line engaged in.

"For illustration, the stability and permanency of furnishing a water supply, one of nature's unchanging products, cannot be questioned. The necessity of providing transportation and communication along present lines or present lines improved is fairly assured, but to what extent the consumption may be limited by the constantly improved devices for augmenting the heat and lighting power of a given quantity of gas or to what extent the growing development of the uses of electricity may supersede gas for lighting and other purposes is problematic, yet to some extent seems certain, and the nature of a gas plant or an abandoned or disused portion of a gas plant is such that it cannot be readily utilized for any other purpose." . . .

Under the present rates the company has earned approximately  $6\frac{3}{4}$  per cent.

"Under all the circumstances connected with this case the Commission is of the opinion that the present rate of return is fairly liberal and that should the company's business increase during the next few years in the ratio of increased income and expenses shown during the past ten years a reduction of rate should be anticipated. On the other hand, considering the risk assumed, the increasing cost of operation, the better and more extended service that can

fairly be required of and furnished by a company with a fair margin of profit above mere compensation, we are of opinion that the present rate of the company is not unreasonable.

“For the reasons herein stated the petition is denied.” . . .

## **CONNECTICUT**

### **226.2—Extension of Service.**

COMPLAINT V. BRIDGEPORT GAS LIGHT COMPANY, Requesting Extension of Main. Decision of the CONNECTICUT PUBLIC UTILITIES COMMISSION, Ordering the Extensions. August 18, 1914.

Informal complaints were received by the Commission, alleging that the gas company had refused to make extensions of mains necessary to serve complainants.

The Commission dismissed the McMurray petition for a reduction in the company's rates, giving as one of the reasons that better and more extended service could fairly be required of and furnished by a company with a fair margin of profit above mere compensation. (See rate case given above.)

“The Commission is of opinion that a company which is allowed to earn annually a fair reasonable net income, which it has been shown that this company is now earning, should at the same time follow or be required to follow a correspondingly fair and reasonable policy regarding the service given and compliance with requests for extensions. We do not believe that before every portion of a main is laid it should be shown to be prospectively profitable or perhaps even self-sustaining from the start. So long as there is reason to believe that a proposed extension will produce business which will now or shortly show no material loss to the company, the company should make the extension when requested at its own expense, and should, itself, bear whatever risk of loss or actual loss may be incurred prior to the extension becoming actually profitable.” . . .

## **CALIFORNIA**

### **132—Protection from Competition.**

GUGLIELMETTI TELEPHONE COMPANY V. CHILENO VALLEY TELEPHONE COMPANY, Asking for Protection from Competition. Decision of CALIFORNIA RAILROAD COMMISSION, Requiring Invader to Discontinue Service. October 3, 1914.

The defendant telephone company provided an extension of line to serve M. De Martin, the president of the company. The extension was

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made without securing certificate of convenience and necessity from the Commission. Subsequently a number of the petitioner's patrons went over to the other company, attracted by lower rates.

"It is shown by the records that the complainant did not oppose the extension of defendant's lines for the purpose of serving Mr. De Martin, and at the suggestion of the Commission the complainant and defendant each agreed at this hearing to arrange a mutually satisfactory compromise contemplating the withdrawal of the defendant from Chapman Lane, except that it should continue to serve Mr. De Martin. Ample time has been allowed by the Commission to all parties concerned to arrange a satisfactory adjustment of their difficulties, but although it is plain that this extension was made in violation of the provisions of the Public Utilities Act, such adjustment has not yet been effected. In view of this fact and all of the circumstances involved, the duty of this Commission appears to demand the exercise of its powers to require due observance of those provisions, and I shall recommend that the defendant, Chileno Valley Telephone Company, except that it be permitted to continue to serve Mr. De Martin. . . . over the defendant's lines, be required to remove or otherwise dispose of its lines along said Chapman Lane, and to discontinue serving any and all other patrons located in this particular locality until the further order of this Commission."

## REFERENCES

### INVESTMENT AND RETURN

#### 310—Valuation.

FUNDAMENTAL PRINCIPLES OF PUBLIC UTILITY VALUATION, by JOHN W. ALVORD. *Proceedings of the A. S. C. E.*, 47 pages. October, 1914, p. 2389.

The paper shows that the science of valuation calls for a knowledge in three professions or callings; the law, engineering and economics; and that, fundamentally, it is the law, and its interpretation by the higher courts, which controls.

The fundamental definitions of value and property are given, and the constitutional conception of what it is that is to be valued is shown, with citations from leading cases passed on by the Supreme Court. The point is made that the law determines that it is a "property," rather than an actual past investment, that is to be valued, and that the value must be found as of today. The fact that we are to value a property as of today indicates why the reproduction method obtains its importance, but it is made clear that reproduction is only a cost method, that cost is not value, and that the courts have indicated that all lines of material evidence should be examined.

**310—Valuations.**

THE VALUATION OF PUBLIC UTILITY PROPERTY, by I. H. GANDOLFO. *Proceedings of the A. S. C. E.*, 37 pages. October 1914, p. 2439.

The primary object of this paper is to show that, in any valuation or appraisal that is to be made for purposes of rate making or security issues, the proper figure to be used is the actual cost to date of the work in question; provided, of course, that there has not been extravagance, fraud or gross mismanagement in the origin or development of the enterprise. At the same time, it is also shown that, although this value is a basic figure, it is not necessarily the only and final one to be used for any and every purpose for which a valuation may be undertaken. Reproduction or replacement cost, cost of reproduction less depreciation, etc., all have their proper place, and should be used under the proper conditions.

*Note.*—The above papers on valuation by Messrs. Alvord and Gandolfo are to be presented November 18, 1914. They are published in full in the Proceedings, and discussion is invited.

**310—Valuation.**

THE VALUATION OF RAILROAD RIGHT OF WAY, by FRANK W. STEVENS, Counsel for New York Central Lines. 1914. Pamphlet, 47 pages.

The interpretation which should be given the word "value," and the elements which should be included, are discussed. It is alleged that any method of valuing right of way which disregards that element of value arising from the extent of the demand for its use, past, present and prospective, is confiscatory, and the sole function of courts in rate making cases is to prevent confiscation.

**310—Valuation.**

In the Matter of the Valuation of the INDIANAPOLIS LIGHT AND HEAT COMPANY, Before the INDIANA PUBLIC SERVICE COMMISSION. Brief on Behalf of the Company. 122 pages.

A brief has been submitted by Charles N. Thompson, Elmer E. Scott and Olin, Butler, Stebbins, Curkeet & Stroud, Attorneys for the Company.

**330—Capitalization.**

WHEN BONDS COME DUE, by H. P. WRIGHT. Before the Annual Convention of Kansas Utilities Association, Arkansas City, Kansas. October 23, 1914.

No financial plan is sound, either for the borrower or lender, unless it makes some provision for the payment of its bonds. It is neither possible nor good policy for a company to undertake to amortize its bonds by a sinking fund that will pay all of them at maturity. A growing concern not only has to save all of its money for new construction but it has to be "tailed up" from the outside in addition. The company attempting to bear the burden of a heavy annual sinking fund "will go busted if it grows or starve to death if it does not." The other plan to take care of maturing bonds is the only workable one, under present conditions. This plan is to build up a credit for the concern sufficient that when the bonds come due the company will be able not only to borrow enough money elsewhere, at a reasonable rate, to retire the maturing bonds, but to provide money in addition to take care of additional construction and enlargement and provide for future growth. This plan is approved by the highest financial authorities and is considered the only safe method to follow under present conditions. The uncertainty of securing a continuation of the franchise of a utility company is the most troublesome factor to deal with. When the public understands fully that the expense of blackmail and persecution must inevitably come back in the shape of increased rates by the utility company, it will demand, as it has already done in several states, that the

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local franchise be done away with and that the utility company shall operate under the state charter, the same as a bank or mercantile company with full power of state regulation, both as to service and rates, and local authority will be reduced to the regulation of the conduct of business. The old system of franchise is a political and financial monstrosity and there is no doubt but that within a very few years the old system will have entirely passed away. A conservative and scientific financial plan, coupled with a high credit, including all that goes to make that up, and preparation to make a moderate payment are the only things for a manager to count on when his bonds come due.

### **360—Depreciation.**

DEPRECIATION AND RATE CONTROL, by ALLYN A. YOUNG. Pamphlet, Reprinted from *The Quarterly Journal of Economics*. 32 pages, August, 1914.

Two questions outrank in practical consequence all other problems of procedure in the valuation of the properties of public service companies for purposes of rate control. First, what is a proper rate of return upon the investment? Second, shall the property taken as evidence of the investment be valued for that purpose as though it were new, or shall an allowance be made for the fact that it is in various stages of age, wear, and obsolescence? The paper deals with the second of these important issues. The mode of reckoning depreciation required by the Interstate Commerce Commission, State Commissions, and courts is discussed. In conclusion it is stated that in valuation for purposes of rate control no deduction should be made on account of the depreciation of large and varied properties, except for depreciation allocated to a period in which depreciation accruals were regularly charged to operating expenses.

## **GENERAL**

### **786—Tests and Accuracy of Meters.**

THE CENTRAL STATION AND THE SERVICE METER, by CLARENCE REID. Read before the Kansas Gas, Water, Electric Light, and Street Railway Association at its Seventeenth Annual Convention, Arkansas City, Kansas, October 22-24, 1914.

The paper discusses meter and meter testing equipment and points out the importance of preventing waste from incorrect meters. The meter department of a central station, considering its vast importance to the net profit, frequently does not receive the attention it deserves from the central station manager. Too many central station managers regard the meter department as one of minor importance, with the result that but little, if any, attention is paid to the equipment for testing and maintaining the service meters. To those familiar with the metering problem, it seems strange that so many managers will spend large amounts of money, thought and time in planning improvements in the generating apparatus, or distribution systems, in order to effect a comparatively small saving, and then permit many times this possible saving to "leak out" through neglect to keep the watt-hour meters in proper condition. When it is realized that as much money is now often lost by the use of imperfect meters as can be wasted by the use of inefficient engines and boilers, the importance of not neglecting this department becomes very evident.

**COURT DECISION REFERENCES.****221.1—Issue of Stock and Bonds.**

WILLIAM R. COMPTON ET AL V. ALLEN et al. Decision of the DISTRICT COURT, S. D. IOWA, CENTRAL DIVISION. July 6, 1914. 216 Federal 527.

The suit was brought by citizens of the States of Missouri, Indiana and Maine to restrain the enforcement of an act of the General Assembly of Iowa, approved April 19, 1913 (Acts 35th Gen. Assem., C. 137), commonly termed the "Blue Sky Law" of that state. The court holds that stocks, bonds and securities are subjects of interstate commerce, and sales of the same between the states are interstate commerce; and that the Iowa law is not within the police powers of the state as an inspection law, but is unconstitutional and invalid, as imposing a direct burden on interstate commerce and as imposing burdens upon and denying privileges to citizens of other states, which are not imposed upon, and which are granted to, citizens of Iowa.

**380—Taxation.**

SPOKANE & I. E. R. Co. v. SPOKANE COUNTY ET AL. Decision of the WASHINGTON SUPREME COURT, September 26, 1914. 143 Pacific 307.

The appellant owns a street railway system within the city of Spokane. A valuation was placed upon its property in 1911 by the railroad commission. This valuation was used for the purposes of taxation for the year 1912. When the state board of equalization convened, the plaintiff appeared before it and asked to be permitted to introduce evidence tending to show that, since the time of the investigation of value made by the public service commission, conditions had so changed that the value of its operating property had greatly decreased. The state board of equalization refused to hear evidence with respect to the change of condition of value for the reason, that as it believed, it was without power to change the value found by the public service commission in 1911. Appeal was made to the Superior Court and a judgment was entered dismissing the action. The Supreme Court holds that the finding of the commission for the year 1911 is not open for review, but the question to be determined is, accepting that finding as final as of date made, whether subsequent thereto, and prior to the assessment for the year 1912, there had been a material depreciation. The cause is remanded with instructions to the Superior Court.

**800—Municipalities.**

EX PARTE CITY OF COVINGTON. Decision of the KENTUCKY COURT OF APPEALS. October 7, 1914. 169 Southwestern 718.

The court holds that the city council of Covington, in ordering an election and submitting to its voters the question of incurring an indebtedness for the extension of its water works system, did not comply with the requirements of the statute. The notice did not specify the annual assessment for the purpose of paying the interest and creating a sinking fund. It should have stated that the assessment "shall not exceed" a certain amount. The judgment of a lower court is reversed with directions to declare the election invalid.

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November 19, 1914

No. 8

# RATE RESEARCH



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## Rate Research

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CONTENTS	Page
COMMISSION DECISIONS.....	115
California .....	115
Pennsylvania .....	122
REFERENCES .....	126
Rates .....	126
Investment and Return.....	127
Public Service Regulation.....	127



# Rate Research

Vol. 6

CHICAGO, NOVEMBER 19, 1914

No. 8

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### CALIFORNIA

#### 300—Investment and Return.

APPLICATION OF THE SOUTHERN PACIFIC COMPANY, For Authority To Make Certain Increases in Fares. Decision of the CALIFORNIA RAILROAD COMMISSION, Dismissing the Application. October 10, 1914.

The Southern Pacific Company, operating a number of suburban lines between points in Alameda County to connection with its San Francisco boats, applied for permission to maintain a fare greater than 5 cents between points within the city of Oakland and for permission to increase its monthly commutation and one way fares between San Francisco and Alameda Points. The Commission refused to allow an increase in the rates which had been voluntarily offered by the company and which the patrons of the company had depended upon when purchasing property along the applicant's lines. Certain adjustments are to be made after further conference between the company, other interested parties and the Commission's engineers. In discussing the company's valuation and the various contentions for increased rates urged by the company a number of holdings are made by the Commission which are of general interest. These holdings are set forth under appropriate headings without further discussion of the details of the local situation except as shown in the discussion by the Commission.

#### 312.2—Leases.

"Oakland pier was constructed by the company and its predecessors. Much litigation has been carried on between the company and the city of Oakland over the ownership of this pier, and finally by agreement the company was given a franchise for fifty years to operate over the pier, thereafter the property to revert to the city of Oakland. The company arrives at a valuation for this pier and apportionments such valuation over the fifty years of the franchise so that within that time it shall have had returned to it the value of this property. It is contended by the protestants that inasmuch as this pier has been in existence and in use for a considerable period already, in the neighborhood of thirty years, if an arrangement is to be

approved whereby its value is to be returned to the company at the expiration of its right to use it, it must be assumed that it should have returned to it for each one of the fifty remaining years during which the right to use exists one eightieth instead of one fiftieth of its value. . .

"We can see no justification for the position assumed by the company with reference to the cost of the pier and the distribution of the expense. This important property is now sought to be treated by this company exactly as though it were owned in fee simple. That is, it is assumed that during the fifty years' right to use remaining to the company there shall be returned to the company annually an interest upon the entire value, and in addition thereto, a sufficient amount so that at the expiration of the term the company shall have received an amount equal to the total present value of the property. In other words, it is assumed that reversionary interest belonging to the city of Oakland is at the present time valueless. With this contention we do not agree. Assuming that this property has been in use thirty years, which, added to the fifty years yet remaining, would make a total of eighty years during which time the company will have used this facility, it cannot even then, as contended by the protestants, be logically held that one eightieth of the present value shall be returned annually to the company. Where, as here, a utility has made improvements upon a property to which it has no title, the most that could be expected by such utility would be the return of the cost incurred by it, and there should be added to its expense the fair rental value of the property used during the term. . . We do not intend to suggest a substitute for the theory advanced by the company or the one urged by the protestants. In a proceeding such as this, wherein rates are to be raised the burden must be assumed by the company to prove its contention, and while it is not for this Commission, under any circumstances to resort to technicalities in order to bring about any particular result, yet under the peculiar circumstances of this case, more than any other case presented to this Commission the strictest adherence to proof on the part of the company seeking to raise these rates must be insisted upon. . . ."

### **317—Construction in Advance of Present Needs.**

The company submitted an estimate representing the cost of electrification of steam lines and the extensions of various electric lines to serve the territory in question.

"We have no evidence showing the cost of operating before electrification, and while this Commission should under no circumstances suggest that improvements and substitutions, such as those brought about by the company in electrifying these lines, should be made without hope of return on the part of the agency making them, yet it is well to bear in mind that often it is necessary to build for the future; and if, as a matter of fact, the officials making the substitution were aware that under the then existing arrangements

an adequate return would be made, yet under the substituted arrangement such an adequate return could only be expected after a considerable lapse of time, this fact should be considered in passing upon an application to increase rates subsequent to the change. For example, one might own a ferryboat which would be just adequate to handle the existing traffic but which was becoming worn out and would have to be replaced. If the traffic was increasing and wise foresight indicated that within a reasonable time a similar boat to the one in use would not be adequate, such wise foresight would justify the purchase of a boat with capacity in excess of the present needs, but it would not necessarily follow that the interest on the added property and the increased cost of operation should fall upon the present traffic when the larger facility was secured to supply the needs of future traffic. . . .

"We believe without question that the company was justified in the electrification of these lines. We are however, not of the opinion that it was justified in the construction of some of the added lines, except in contemplation of increased traffic in the future. Utilities are always required to have an eye to the future, and they should ultimately be paid for the expenditures made. But one of the elements always urged in a valuation case as a part of the value of the property is the cost of development of business and the interest on the money necessarily idle during the development period. If the development period is not too long and the lines are wisely constructed, there can be no question that a proper return should ultimately be had from subsequent traffic. But it is idle to urge that where facilities are constructed in excess of present needs that the rates to the present comparatively few patrons should be so arranged as to give an immediate return. The Supreme Court of the United States has many times discussed this, and of course the rule is well established that facilities constructed in excess of the needs of the patrons may not be made the basis for unreasonable burdens upon the present consumers. Except in the case of certain paralleling competitive lines, we have no question that ultimately the great development that is to come to Alameda County will repay the company for its forehandedness in electrifying and improving these lines. But we do not believe that the officials who advised the electrification and the extensions of these lines for a moment expected at the time of such improvement that the rates would be other than those that have existed so long. The record conclusively shows as heretofore pointed out, that it was understood when these lines were constructed and these improvements made, that such construction and such improvements were made in contemplation of future rather than present needs. . . ."

#### **340—Rate of Return.**

"Testimony was introduced showing the general financial condition of this company and while at the present time it is difficult for anyone to borrow money, still this company is in very good

financial shape and is carrying on an extremely profitable business. In fact, it is in evidence that these very suburban lines were built in their entirety from earnings as is likewise the case of the double tracking across the Sierras and various other improvements that have been and are being made by this company, and this in addition to a 6 per cent dividend upon its stock. All of which indicates that this company is making, viewing its business as a whole, much beyond 6 per cent net because the reinvestment from earnings in capital account, of course, is as much in effect a dividend as the actual taking of the money from the treasury by the stockholders..."

The Commission discusses the "effect of the voluntary according by the company of the rates now sought to be raised" as follows:

"For many years the rates here involved have been in effect. We hear much of confiscation on the part of utilities, and it is now being urged that confiscation results when anything less than the current rate of interest is earned. While, of course, we cannot agree that from a strictly legal viewpoint such a contention is correct, yet we are very willing to admit that regulating bodies never aim to make their rates so low as just to avoid legal confiscation. In the case here involved, however, we feel no hesitancy in saying that the strictest presumptions of law should be adhered to against this company, not for the purpose of confiscating its property but for the purpose of preventing the confiscation of tremendous values in the property of the residents of Alameda County. Thousands upon thousands of people have built their homes in these suburban communities and have paid prices for their property in contemplation of the reasonableness of these rates voluntarily accorded by this carrier. When through a long period of years a transportation company has voluntarily accorded a rate to a community on the faith of which large investments have been made, and when again the same agency has voluntarily and under no legal compulsion incurred great expenditures and largely extended its facilities, the *prima facie* reasonableness which attaches to voluntarily accorded rates becomes, if not conclusive, very strongly persuasive upon any regulatory authority.

"An increase of the commutation rate alone will confiscate or take away from (the term used is immaterial) the value of the residences of every person in the territory here involved who is forced by business reasons to commute to San Francisco. Confiscation in this case looks both ways, and it does not lie in the mouth of this carrier to urge its own confiscation in utter disregard of the confiscation which it, if permitted to have its way, will have brought about among innocent people who are its patrons. Besides, we do not treat as lightly the provisions in the franchises granted by the municipalities involved as the company seems willing to do. While one may be able legally to avoid a voluntarily assumed obligation, still such a one should not be permitted to invoke the rule laid down for the benefit not of itself but of third parties. The rule that contracts of public utilities may be avoided is a rule of public policy

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and does not at all subtract from the moral obligation of the contracting parties. If any one has taken advantage of his power to extort to make an unconscionable contract, or if a utility has entered into a contract, the enforcement of which will work a hardship upon patrons not parties thereto, such contract may be set aside, not in the aid of the party offending but in the aid of innocent people. Regardless of the enforceable provisions of these franchises, the company having accepted the benefit with these conditions annexed should in good conscience be required to assume the burden. . . ."

**360—Depreciation.**

"The valuation presented [by the company] assumes that the property is as valuable as when new. It should be noted that the ferryboats, for example, are from six to twenty years old yet their cost to reproduce new is assumed to be their present value. For the purposes of this case it will not be necessary to discuss the question of depreciation in detail, but we have no hesitancy in saying that we do not believe the cost to reproduce new ordinarily represents the present value of the property. This contention is advanced on the theory that inasmuch as the property performs at 100 per cent efficiency therefore it is as valuable as though it were entirely new.

"In another case now pending we shall discuss this question of depreciation in detail, but it is worth while to point out in passing that the company's engineers here have overlooked one important fact, and have forgotten that if value is to be determined by the work which can be performed by any agency considered, that the amount of work which can be done in any unit of time is only one of the factors, and the second factor is the number of units of time the agency in question will be able to perform this amount of work.

**400—Rate Theory.**

The Commission concludes a discussion of the proper adjustment of rates as between the main line passenger and the local suburban passenger, as follows:

"In short, from the standpoint of what the traffic will bear, a sufficient and legitimate doctrine, if properly understood and circumscribed, but not as usually urged by the carriers, the apportionment here must fall, for the limiting maximum rate beyond which the carrier may not go and hold his traffic is always the amount the patron can afford to pay, while the limiting minimum rate below which the carrier cannot afford to do the business is the actual added cost to the carrier of such business over the cost such carrier must for other and independent reasons incur. In short, it has appeared to us that both the courts and Commissions have been in error in determining the lowest rate that a utility may reasonably and lawfully afford. This rate, the courts and commissions to the contrary notwithstanding, may be and often is below the actual cost of performing an average unit service. For example, in the

case of a hydroelectric company, it may be that the actual units of power available, cost unit for unit, a certain amount in actual out-of-pocket expenditure. Therefore, if we view this subject superficially we would immediately say that this company could not afford to furnish its commodity at a less rate than the actual out-of-pocket cost per unit. But on inspection, it may appear that by reason of the impossibility of operating in every instance to maximum efficiency, there is excess property and excess expense incurred in performing the total service performed at any one time, which will not be appreciably, if at all, increased by performing some additional service. Therefore, when it becomes a question of performing or not performing the additional service, under the circumstances stated, the utility does not and should not look to the average expense of performing the unit of service, but looks to the added cost and the added revenue alone, which added cost may be much less than the average cost per unit and which added revenue may be less than the average revenue that must be required per unit. Therefore in determining whether or not such added business shall be done, the considerations we have herein discussed are the ones a wise economy will require to be studied.

"Suburban traffic is essentially a wholesale traffic. Suburban rates are essentially wholesale rates. Therefore, it is violative of fundamental rules of rate-making to apply units of expense and enforce divisions of property on an equality with a service which is essentially different and essentially retail. Therefore, without going into this matter further, it conclusively appears to us that such a fallacy exists in the method of apportionment, both of property and expense, between main line and suburban business that here again it may be said that the company has not sustained its burden of proof. . . ."

#### **629—Competition.**

"In discussing the evidence, it has already appeared that many of the lines of this company are in direct competition with the lines of the San Francisco-Oakland Terminal Railways. We have so often expressed ourselves on this question that we think it unnecessary to again discuss it extensively. Competition between natural monopolies and regulation of natural monopolies are inconsistent. If competition is to exist between natural monopolies and the rights of the public are to be enforced through competition, then the State should go no further than to see to it that actual competition exists and that no combinations of the slightest binding effect are permitted. Under such competitive arrangement there will be the tendency on the part of the owners, if absolutely independent from their beginnings in the money sources down to their actual minutest operations, to take the smallest return on their investment possible and to enforce the greatest economies than can be brought about. Inevitably, if any patron or any locality is so unfortunate as to be outside the influence of this competitive force,

such patron and such locality, in the absence of regulation, must expect to pay every cent that can be extorted, unless the conditions are such that the fear of competition and of rivalry for the business of such patron or community minimizes the severity of the extortion.

"On the other hand if regulation is to assume the function that it is attempting to assume in most of the states and in the federal government, as far as railroads are concerned, it can enforce, if it is adequate to the job, the efficiency and the economy that we have shown competition tends to enforce without the duplication. The total sum which is necessary to be paid for service by a natural monopoly will, of course, be less if the minimum amount of investment which is required to perform the service be made. This is so simple that we are at a loss to understand the difficulty with which some people grasp it. It will be noted that we have said 'the sum necessary to be paid.' Of course, under inadequate regulation, the sum that is paid is often greater and the service that is performed is usually inferior without competition than with it. But it does not follow from this that with strong laws and competent officials to enforce them, one street railway line on a street cannot be required to furnish a better service at a lower rate than can be accorded by two street car lines doubling the investment and dividing the revenue. Regardless of the position which may be assumed in favor of competition or regulation of natural monopolies, still it is certainly true that the public should not be required to accept the evils of both. The evils of competition are duplication of facilities and a necessarily high cost per unit of service. The evils of monopoly in a natural monopoly field are disinclination on the part of those in control of such monopoly to give good service and to accord reasonably low rates. In the case at bar we have it urged that the entire value of competing lines and the entire expense of operating them shall be saddled upon the patrons, regardless of the fact that these lines are admittedly not operated nearly to efficiency. Neither the law nor justice requires this to be done. The attitude of city authorities, however, too often possessed of a merely superficial understanding of the important questions involved, in giving franchises to competing natural monopolies bringing about such duplication of facilities, as unquestionably exist in this case, should be condemned, unless such city authorities incorporate conditions in the franchises granted which will require the utility accepting the franchise to accord as low a rate and as good a service as can be forced if the facilities are not duplicated; and unless, further, such local authorities have a right to expect that they can force the performance of a service demanded in a franchise, even though the agency accepting the franchise has not the financial ability so to do.

"It should be borne in mind, however, even by the most superficial that service must be paid for by some one. If the one legally obligated to perform it is financially unable, by reason of the conditions imposed to perform some one else will have to be substituted.

Patrons cannot secure service for less than the cost of performing it, unless someone else pays the difference between the actual cost and that received. In other words, even boards of city trustees cannot force the impossible.

"We do not believe that under the circumstances under which certain suburban lines of the company were constructed in Oakland and Berkeley, this company has a right to impose upon its patrons a rate sufficient to return to it the amount which otherwise should be returned, on the ground that it has constructed facilities in excess of the necessities of the patrons." . . .

## **PENNSYLVANIA**

### **224.2—Contracts.**

JAMES THOMPSON AND M. A. HANNA AND COMPANY VS. ERIE COUNTY ELECTRIC COMPANY, Alleging That a Certain Contract Rate is Unreasonable. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, Dismissing the Petition. August 18, 1914.

The complaint involves the reasonableness of rates fixed by contract for a supply of current for operating an Hulett ore unloading machine at Erie. The contract was made for a term of five years and was entered into prior to the enactment of the Public Service Company Law.

### **224.5—Rates Fixed by Contract.**

Counsel for both parties agreed that the Commission has power to inquire into the reasonableness of the rates named in the contract and to regulate such rates, notwithstanding the fact that the contract was entered into prior to the passage of the Commission Law and this point is not discussed in the Commission's decision.

The respondent has refused to cancel the contract and the Commission says:

"This matter of cancellation of the contract is one that this Commission has no authority over."

### **612—Power.**

The complainants alleged that its contract rates (Schedule 9) are higher than rates offered other customers receiving similar service (Schedule 8) and further states that a competing company, Erie Lighting Company, offers a lower rate for this service (Schedule D). [Rate Schedules 9, 8 and D, are given at the end of this article].

"As bearing upon the reasonableness of the rates, the testimony given, that the Erie Lighting Company offered to furnish the same service under its Schedule 'D,' and that the charges for current at the Ore Dock at Buffalo amount to a flat rate of \$400.00 per month, furnish no intelligent or proper comparison to the rates complained



of, for the reason that no testimony was given nor data secured as to what the Maximum Demand or its resulting 'Demand' charges would be under and as provided in said Schedule 'D' nor what was the amount of current used or amount of work performed at Buffalo as compared to Erie.

"The Complainant established and emphasized the fact that the electric current it received, is a part of the same current produced at the same time, in the same place, by the same generator, and at the same cost per kilowatt for production as is the current furnished to and 'produced for the vast number of other power customers' of the respondent.

"Is it lawful, then, for the Respondent to charge the Complainant a rate different (be it more or less) from what it charges other power customers? Is Schedule 9 reasonable and lawful in itself, and in its application to the Complainant, and are the rates therein just, reasonable and lawful?"

#### **620—Factors Affecting Rates.**

"The Public Service Company Law enacted July 26, 1913, provides in Article III, Section 1: 'It shall be lawful for every public service company—'

'(a) To demand, collect and receive fair, just and reasonable prices, rates, fares, tolls, charges, or other compensation, for each and every service rendered, or to be rendered by it, to any person or corporation, or to any other public service company with whom it interchanges facilities or services.'

'(b) To employ in the conduct and management of its business, suitable and reasonable classifications of its service, patrons and rates; and such classifications may, in any proper case, take into account the nature of, the use, and quantity used, the time when used, the purpose for which used, the kind, bulk, value, and facility of handling commodities and any other reasonable consideration.'

"and in Article III, Section 8—"It shall be unlawful for any public service company—'

'(a) To charge, demand, collect or receive, directly or indirectly, by any special rate, rebate, drawback, abatement, or other device whatsoever, from any person or corporation, for any service rendered or to be rendered, a greater or less compensation or sum than it shall demand, charge, collect or receive from any other person or corporation for a like and contemporaneous service under substantially similar circumstances and conditions.'

"From the above, it is evident that the classification authorized is not limited to the methods of production, distribution, and operation costs of the producer, but is authorized to be applied to 'the nature of, the use, the quantity used, the time when used, the purpose for which used, etc;' and that the 'classification' extends to the customer, his uses, requirements, et cetera. Under such enact-

ment it is proper and lawful for the Respondent to classify its power customers."

**621—Demand Factor.**

"It has long been recognized in the manufacture of electricity that irregularity in the current demands of a customer results in the least desirable class of business, owing to the necessity of making provision for furnishing sufficient service at the times of greatest requirements for same, and then having a greater or less portion of the power station equipment idle at other times, when the customer has no need of the full amount that provision has been made for. Another difficult service to maintain is where the requirements are subject to sudden and recurring wide fluctuations. In such cases unusual precautions and provisions are required at the generating station to prevent the variable demands of one customer, unless served from an individual generator, affecting adversely the regularity of the voltage and current furnished to all the other customers."

From the testimony it is indicated that there is—

"a considerable and recurring fluctuation in the current requirements at the Ore Dock, and as in addition, the Complainant uses but a small amount of current for two to four months per year, and then a very much larger quantity (200 to 400 times as much) during the 'season of navigation;' and also with a large variation in the quantity of current required from year to year, it is the opinion of the Commissioners that a classification covering such service, and the service rendered to the Complainant, is proper and lawful. . . .

"As the average rate per K. W. hour to power customers served under Schedule 8 varies for each customer monthly, and varies also as between different customers; and as the average rate for the Complainant under Schedule 9 is not considered unreasonably higher than it would be under Schedule 8; and as the Respondent is considered entitled to a separate classification for the service rendered to the Complainant, it is the Opinion of the Commission after consideration of all the circumstances, that the rates named in the Respondent's Schedule 9 of its 'Classification Schedule of Rates, etc.,' are not unjust, unreasonable nor unlawful, and it accordingly directs that the complaint be dismissed."

**720—Rate Schedules.**

**ERIE COUNTY ELECTRIC COMPANY.  
Power Rate, Schedule 8.**

Wholesale raw current service for not less than  $7\frac{1}{2}$  horse power, schedule of rates for power by alternating 3-phase, 60-cycle, 2,300 volts or over. Raw current, when customer provides transformer, or takes current at 2,300 volts, or over.

**Rate.**

**Demand Charge.**

\$1.00 per kilowatt of maximum demand per month, plus an

**Energy Charge of**

.03	cents per kilowatt-hour for the first 1000 kilowatt-hours or less per month.
.0225	cents per kilowatt-hour for 1,000 kilowatt-hours per month.
.018	cents per kilowatt-hour for 2,000 kilowatt-hours per month.
.015	cents per kilowatt-hour for 3,000 kilowatt-hours per month.
.012	cents per kilowatt-hour for 5,000 kilowatt-hours per month.
.01125	cents per kilowatt-hour for 10,000 kilowatt-hours per month.
.0105	cents per kilowatt-hour for 20,000 kilowatt-hours per month.
.0099	cents per kilowatt-hour for 40,000 kilowatt-hours per month.
.0096	cents per kilowatt-hour for 80,000 kilowatt-hours per month.
.009	cents per kilowatt-hour for 160,000 kilowatt-hours per month.
.0085	cents per kilowatt-hour for all over 250,000 kilowatt-hours per month.

(All kilowatt hours consumed between each range to be charged at next lowest rate.)

**Determination of Maximum Demand.**

On 15 kilowatt installation or over, the demand shall be measured by a maximum demand meter indicating for each separate service taken as a unit the monthly maximum demand; but, the aggregate quantity of current used of such separate services (where there are separate services) shall be charged at the lowest rate for energy charge resulting from addition of all such separate services.

**Prompt Payment Discount.**

5 per cent discount for payment on or before the 10th day of each month.

**Minimum Charge.**

\$15.00 per customer per month.

**Terms and Conditions.**

The company will provide transformers for wholesale raw current customers for a rental of 10 per cent per year of cost of transformers, to be paid in monthly installments. The Company reserves the right to specify the size of transformers to be used on rental basis.

**ERIE COUNTY ELECTRIC COMPANY.****Power Rate, Schedule 9.**

Schedule of rate for power by alternating, 3-phase, 60-cycle, 2,300 volt, or over raw current, when customer provides transformer, or takes current direct without transformer, and uses the current at irregular intervals during the season of navigation, and occasionally before and after navigation, if required.

**Rate.**

- 4 cents per kilowatt-hour for the first 100,000 kilowatt-hours per season.
- 3 cents per kilowatt-hour for the next 40,000 kilowatt-hours per season.
- 2 cents per kilowatt-hour for all over 140,000 kilowatt-hours per season.

**Minimum Charge.**

\$4.000 per customer per season.

**ERIE LIGHTING COMPANY.****High Tension or Wholesale Power Rate. Schedule D.**

Available for all consumers using the Company's 2,200 volt, 3-phase service for power purposes. Consumers having a connected load of at least fifty (50) horsepower may supply themselves with light from this power service to an extent not exceeding 20 per cent. of the total connected load.

**Rate.**

Same as in Schedule 8, given above.

**Determination of Maximum Demand.**

By maximum demand is meant the largest amount of power used for a period of five minutes during the month. This is determined or measured by a maximum demand meter or meters. On installations of 15 K. W. or less, the maximum demand will be taken as 75 per cent. of the transformer capacity.

**Prompt Payment Discount.**

5 per cent, prompt payment discount.

**Minimum Charge.**

\$15.00 per customer per month.

**Terms and Conditions.**

The consumer may provide his own transformers or the company will provide and maintain transformers under this schedule at a rental charge of 10 per cent per year of the cost of the transformer, payable in monthly payments. The company reserves the right to specify the size of transformers to be used.

## REFERENCES

### RATES

**400—Rate Theory.**

THE NATURAL AND MARKET PRICE OF PUBLIC UTILITY SERVICES, by FREDERIC J. WHITING. 6½ pages, *Stone & Webster*, November, 1914, p. 341.

If through government regulation, the market price of public utility services is forced below the natural price, the development of the industry will be greatly retarded and new capital will be warned against entering public utility business. From now on public utilities in search of capital will find themselves in keener competition with other borrowers than ever before in their history. The successful applicants will be the ones than can present the largest opportunities to investors. The phrases "sellers' market" and "buyers' market" are in common use in trade. The former means that the seller is able to name the price and the latter that the buyer dictates the terms. In other words, it is investors and not public utility commissions who will have the dominant voice in the disposal of public utility securities in coming years. Whether this should in any way modify the policy of the commission, is a question which one would expect them to take up for immediate consideration.

**510—Forms of Rates.**

APPROVAL OF DEMAND RATES BY PUBLIC SERVICE COMMISSIONS. *Electrical Review and Western Electrician*, November 14, 1914, p. 960.

A review is given of the conclusions of the public utility commissions as to the proper form or forms which should be used in expressing rates for electric utilities. Many of the Commissions, including New Jersey, Michigan, Vermont, New Hampshire, Rhode Island, Connecticut, Washington, Pennsylvania, Illinois, Indiana and the District of Columbia, have handed down no decisions whatever affecting electric rates. Of the remaining commissions, only a few have gone far enough

to investigate the types of electric rates, and to approve or disapprove of a type, or even to refuse to approve of any type, as in the case of Massachusetts. While some of the commissions have approved of meter rates, either in the form of the straight-line meter rate or as the meter rate with discounts for quantity, either in the block or step form, in general the commissions which have approved of the demand type of rate seem to be more sure of their ground, and their decision to approve of a demand rate, as evidenced by their reports, indicates more careful and extensive examination into the subject, than is the case where meter rates have been approved. Commissions which have approved of demand rates are Wisconsin, New York (2 D.), Missouri, Ohio, Oregon; commissions which have ordered in meter rates but not of the demand type are California, Arizona, Idaho, Montana, Kansas, Georgia, Oklahoma and Nevada; and commissions which have handed down electric rate decisions but have refrained from definitely approving any type of rate are Massachusetts, New York (1 D.), and Maryland.

## **INVESTMENT AND RETURN**

### **360—Depreciation.**

THE CALCULATION OF DEPRECIATION, by GEORGE E. BARRETT, 1 page, *Electrical Engineering*, November, 1914, p. 449.

The importance of carefully determining a method of taking care of depreciation is urged. A formula is given for estimating the yearly rate to be set aside to cover depreciation and a table is included, showing approximately the useful life of plant machinery.

### **390—General Investment and Return Information.**

A RAMBLING TALK ON EUROPEAN PUBLIC UTILITY CONDITIONS, by W. J. CLARK. Read before the Public Service Company Section of the A. E. R. A., Newark, N. J., October 29, 1914.

Public utility conditions in England and other European countries are discussed and data are given providing comparisons between conditions in these countries and in the United States. The tables include data for both private and municipal, or public, operation. The extent and utilization of public utility facilities in the United States are comparatively greater than elsewhere and this fact affords the best possible evidence that the methods followed in the creation and operation of our public utilities are economically sound.

## **PUBLIC SERVICE REGULATION**

### **100—Public Service.**

PUBLIC POLICY, by F. T. POST. 3 pages, *Public Service*, November, 1914, p. 133.

The classification of all business into "public callings" and "private business" and the public policy as to the regulation of business, public and private, is discussed. Particular attention is given to the policies of commissions in making valuations of public utilities and in allowing for a fair rate of return in rate investigations.

**149—Holding Companies.**

HOLDING COMPANIES AND THE PUBLIC WELFARE, by CHARLES F. MATHEWSON. Address delivered before the American Academy of Political and Social Science, at Philadelphia, November 14, 1914.

The service performed by holding companies is discussed and the paper concludes that the great majority of holding companies exist to meet a real need; they add immensely to the development and the efficiency of the service of public utilities, and inure enormously to the benefit, not only of their immediate customers, but also of the entire communities in which such utilities are located. Holding companies make possible the procurement of capital in the development of public utilities which could not be obtained by local companies more or less dependent upon the local financial resources. Investments made through a holding company are more secure because dependent upon the average of a number of enterprises with property interests diversified as to territory and character. The holding company can also be an agent promoting greater efficiency as it is in a position to command engineering and executive skill of a quality, and to acquire supplies in wholesale quantities at a price, and, frequently, to control sources of energy which it is able to distribute at a rate per unit, impossible to a local company relying upon its own resources. The writer also points out that there is a distinction between public utilities and other corporations and says that the holding company, so far as it relates to public utilities, is not open to the objection which has been strongly urged against holding companies in commercial business.

**200—Public Service Regulation.**

HOW UTILITY REGULATION HAS WORKED OUT, by JOHN A. BRITTON. 2 pages, *Public Service*, November, 1914, p. 145.

Mr. Britton, General Manager of the Pacific Gas & Electric Company, comments favorably upon the results of regulation by state commissions. He states that the California commission has inspired the investor with confidence in California securities by affording protection against reckless and improvident competition, and by requiring careful and proper expenditure of capital.

**226.5—Standards of Service.**

A DISCUSSION OF THE RULES OF THE PENNSYLVANIA COMMISSION. 3 pages, *N. E. L. A. Bulletin*, October, 1914, p. 575.

The discussion by Prof. L. H. Harris, consulting engineer of the Pennsylvania Public Service Commission, of the rules and regulations of the commission pertaining to electric utilities is given, as presented before the annual meeting of the Affiliated Pennsylvania Electric Association, in September, at Eagles Mere, Pennsylvania.

**261—Public Service Bills.**

NATIONAL CIVIC FEDERATION. 3½ pages, *Electric Railway Journal*, November 14, 1914, p. 1096.

The main features of the model bill drafted by Executive Council of the Department on Regulation of Interstate and Municipal Utilities of the National Civic Federation are abstracted. A brief review of the memorandum of transmission by Seth Low and William R. Willcox, and a résumé of suggested amendments to the bill are given.

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November 26, 1914

No. 9

# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
REPORT ON ELECTRIC RATES.....		131
Cincinnati, Ohio.....		131
COMMISSION DECISIONS.....		134
Massachusetts.....		134
Indiana.....		141
REFERENCES.....		142
Rates.....		142
Public Service Regulation.....		142
Municipalities.....		143
General.....		144



# Rate Research

Vol. 6

CHICAGO, NOVEMBER 26, 1914

No. 9

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## REPORT ON ELECTRIC RATES

### CINCINNATI, OHIO

#### 300—Investment and Return.

Report on the Valuation of the Property and the Electric Rates of the UNION GAS AND ELECTRIC COMPANY, Cincinnati, Ohio, by ARTHUR C. KING. November 7, 1914.

Mr. King, expert for the City, has submitted a report to the City Council for the purpose of fixing electric rates by ten year ordinance. Mr. King is the engineer who assisted City Electrician Palmer, in the report for the City of Chicago in the investigation of the rates of the Commonwealth Edison Company.

#### 310—Valuation.

A summary of the findings, in regard to the valuation, and the investigation of revenues and expenses, is given as follows:

"The bulk of the property used for furnishing electric service is owned by the Cincinnati Gas & Electric Co. An appraisal was made of the used and useful property for furnishing service within the City of Cincinnati, treating it as under unified ownership. A summary of this valuation is as follows:

Reproduction Cost New.....	\$7,952,893.79
Existing Depreciation.....	1,104,133.48

Present Value.....	\$6,848,760.31
--------------------	----------------

"The income accounts for the twelve months ending June 30, 1914, were examined and adjusted, the final figure for Cincinnati business being \$2,023,835.61.

The expenses were treated in a similar manner to income. The amount including miscellaneous deduction from income being \$840,969.91.

"The net earnings as shown by these figures are \$1,182,865.70."

Deducting the depreciation reserve and return on investment from the adjusted net earnings, the excess revenue derived from the present business which would be the maximum that could be devoted to rate reductions is found to be \$330,709.22, approximately 19% of the total income exclusive of municipal lighting which is being furnished under a ten year contract.

"In the above, no allowance has been made for contingencies which are sometimes taken into account by allowing a somewhat greater return than shown by the calculations. In any event it would appear that a reduction of  $17\frac{1}{2}\%$  should be made."

### 312.9—Paving Over Mains.

The cost of paving is included in the valuation. The calculation of this cost was made along the same lines as in the Commonwealth Edison Report.

### 314—Overhead Charges.

"The overhead charges as estimated in the present case are as follows:

"Engineering and architect's fees  $5\%$ ; taxes, fire and liability insurance during construction  $1\%$ ; legal, organization, contingent and miscellaneous expense  $4\frac{1}{2}\%$ , totaling  $10\frac{1}{2}\%$ .

"It is estimated that it would require approximately two years for the construction of the plant and distribution system, and the interest during construction has been estimated accordingly at  $6\%$ , assuming that the money would be provided in several installments, and that idle funds would draw interest at the current rates. Six per cent added to the total of  $110\frac{1}{2}\%$  of the base cost makes a total overhead expense of  $17.13\%$ . This percentage has been added only to construction items, which include buildings, power plant and sub-station equipment, overhead and underground distribution system.

"Ten per cent only is added to the cost of pavement, as engineering fees and insurance would not be incurred as the paving would be replaced by the city.

"In the case of land necessarily purchased in advance,  $12\%$  is added as representing interest, carrying charges, taxes, etc., during the construction period. Where property is held under lease, the lease rental for a two year period is included in the overhead expense.

"In the case of customer's meters, arc lamps, tungsten fixtures, horses, wagons, automobiles, furniture, tools, etc.,  $5\%$  only is allowed, as these items are purchased as needed. This percentage is deemed sufficient to cover the necessary purchasing and incidental expense.

"The overhead expense on the entire property as determined on the above basis amounts to  $15.75\%$  of the base cost. . . ."

The possible saving in engineering expense and interest during construction charges due to piece-meal construction is offset by the additional and higher costs on such construction—such as the cost of

tearing out old equipment, which is replaced by the new work without interruption to the service, higher percentages of profit demanded by contractors on small jobs and the higher cost of material when purchased in small quantities.

"The final result is that there is less difference between the reproduction cost of the plant considered as being constructed a unit and as actually built on more or less of a piece-meal basis, than might at first be supposed.

"An examination of the total overhead expense estimated in various appraisals for rate making or purchase cases, reveals a great variation, the maximum and minimum figures being about 30% and 6% respectively.

"This extreme variation is due in part to the fact that in some instances items of superintendence during construction, contractors' profits, etc., have been included in the base cost, and in other cases, the estimates have included these items as part of the overhead expense. As a rule, the percentage of overhead expense varies from 12% to 22%."

Overhead charges were depreciated in the same ratio as the physical property.

#### **315—Intangible Values.**

No allowance was made for intangible values. The different theories for estimating going value are considered. Discussion of the going value of the property in question was based on the theory approved by the New York court in the Kings County Lighting rate case.

#### **318—Working Capital.**

The amount allowed for working capital is \$241,673, which is approximately 12% of gross income.

#### **340—Rate of Return.**

"The rulings of the various public service commissions have established 8% as a fair rate of return in electric cases, and considering all factors bearing on the case, it seems fair to fix 8% as the allowance in this instance. . . ."

#### **360—Depreciation.**

The amount allowed as a deduction from net earnings to offset future depreciation is \$284,921.82, which is 3.58% of the cost of the property including real estate, or 3.80% of the cost of the property excluding real estate.

The following depreciation table is given in the report:

DEPRECIATION TABLE.

	Years Life	% Net Salvage	% Depre- ciation.
<b>Buildings.</b>			
Generating Plant.....	60	0	1.67
Sub-station.....	50—60	0	2.00—1.67
Office.....	60—75	0	1.67—1.33
Miscellaneous.....	40—60	0	2.50—1.67
<b>Generating Plant.</b>			
Stacks.....	30	0	3.33
Boilers, etc.....	20	4.0	4.80
Generating Units.....	20	5.0	4.75
Electrical Equipment.....	20	10.0	4.50
Piping and Auxiliary.....	20	6.0	4.70
<b>Sub-stations.</b>			
Electrical Equipment.....	20	10.0	4.5
Storage Batteries.....	20	17.0	4.15
<b>Underground System.</b>			
Conduit, fibre, iron pipe.....	28	0	3.57
Conduit, tile, Manholes.....	60	0	1.67
Edison Tube.....	28	10.4	3.20
Cable.....	30	36.2	2.13
Services.....	25	15.0	3.40
<b>Overhead System</b>			
Poles and Pole-Line Equipment.....	20	12.0	4.40
Wire.....	16	40.2	3.74
Services.....	16	24.7	4.71
Line Transformers.....	20	10.0	4.50
<b>Miscellaneous.</b>			
Customers Meters.....	18	9.4	5.03
Arc Lamps.....	16	10.0	5.63
Tungsten Fixtures.....	8	0	12.50
Transportation Equipment.....	7	5.0	13.57
Office Furniture and Fixtures.....	10	0	10.00
Tools, etc.....	8	0	12.5

(Abstract of the report will be continued in the next number of RATE RESEARCH.)

## COMMISSION DECISIONS

### MASSACHUSETTS

#### 300—Investment and Return.

THE MIDDLESEX AND BOSTON RATE CASE. Decision of the MASSACHUSETTS PUBLIC SERVICE COMMISSION, Approving an Increase in the Rates of Fare of the Middlesex and Boston Street Railway Company. October 28, 1914.

The Commission finds that the company's rates of fare are inadequate and the company is ordered to charge six cents for each single ride

between existing fare limits. The Commission discusses the relation of the company with the Boston Suburban Electric Company, and various questions of valuation and return on investment.

#### **144—Mergers.**

Certain of the Company's patrons alleged that the consolidation of the various lines resulted in their line having to make up losses on lines running through thinly settled territory and that they were required to pay rates higher than the cost of service on their line.

"The argument, in effect, is that in fixing fair rates for a consolidated company like the present, the Commission should go behind the orders of consolidation and attempt to recreate on the different lines the financial conditions which we think would have existed on these lines had there never been any consolidation.

"Doubtless, when application is made to the Public Service Commission for approval of any proposed consolidation of street railway companies it is open to any community which thinks its interests will be adversely affected by such consolidation to appear and oppose it. . . . Undoubtedly it would be the duty of the Commission to refuse its approval of a consolidation if it appeared that because of the consolidation either the facilities for travel were to be diminished or the rates of fare were to be increased.

"But if we assume, which is very doubtful, that the Commission now has any legal right to deal with the petitioning company other than as an integer, it would be difficult—practically impossible—to recreate with even approximate accuracy the conditions which might have obtained upon the different lines if there had been no consolidation. . . ."

#### **149—Holding Companies.**

The syllabus of the case prepared by the Commission summarizes the holdings in regard to the Company's relation to the holding company as follows:

"Control of a street railway company by a holding company—which loans large sums to the street railway company at a substantial profit to the holding company; which controls a company selling power to the street railway company and also owns a park company to which large annual payments are made by the street railway company—is obnoxious to sound principles of corporation managements and confusing to a proper system of regulation by this Commission. Such control and interlocking management call in question the validity and advantage to the street railway company of all contracts made with the holding company or with other interlocking companies or in any way growing out of the common control.

"The petitioner has not fully sustained the burden of showing that the rates paid for the money borrowed by it from the holding company were as low as it might have obtained in the open market; nor has the petitioner fully sustained the burden of showing that the con-

tract made with the Edison Company for power, contemporaneously with the sale by the holding company to the Edison Company of the plant formerly furnishing a substantial portion of the power used by the street railway company, was the best available arrangement for the street railway company.

"Whether the petitioner's investment in and payments to the interlocked Norumbega Park Company have resulted in net profit or loss to the railway company is doubtful; but the existing relations are illegal as ultra vires and as an attempt to avoid the limitations upon the ownership of pleasure resorts imposed by statute 1906 chapter 463, Part III, section 34."

#### 224.5—Rates Fixed by Contract.

"A fundamental question presented by counsel is as to the lawful right of the company to charge more than five cents for a single fare on certain lines in Newton, in Wellesley and on some other parts of the system. The claim is that because of conditions in some of the locations granted or as a result of alleged agreements made between municipal authorities and the company, the railway is prohibited from charging more than five cents on these lines. . . . In the opinion of the Commission it is not necessary to detail the facts concerning these conditions, nor to attempt to determine the original validity or invalidity of the so-called agreements between municipal authorities and the company. For, what ever may have been the situation prior to the enactment of the Public Service Act, we regard that Act as vesting in this Commission full power to regulate and prescribe just and reasonable rates. . . .

"This statute clearly vests in this Commission full jurisdiction to determine and order rates that are just and reasonable, whether lower or higher than existing rates. (Cf. *Springfield v. Springfield Street Railway Company*, 182 Mass. 41; *Clinton v. Worcester Consolidated Street Railway Company*, 199 Mass. 279; *Keefe v. Lexington & Boston St. Ry. Co.* 185 Mass. 183; *Westwood v. Dedham & Franklin St. Ry. Co.*, 209 Mass. 213.) The Commission rules as a matter of law that any alleged conditions or limitations as to fares contained in original grants of locations or growing out of agreements or attempted agreements between municipal authorities and the petitioning railway company or any of its antecedent constituent corporations are not valid and controlling as against the rate-making power now vested in this Commission by the Public Service Act." . . .

#### 311—Basis of Valuation.

"It would serve no useful purpose to load this opinion with a detailed discussion of the different meanings attached to the word "value" in the enormous literature dealing with the proper basis of rate-making. It is sufficient here to observe that few words having a fundamental importance in dealing with questions of law and finance have been found more difficult of accurate and generally-accepted definition.

"See *Fuhrmann v. Cataract Power and Conduit Co.* III N. Y., P. S. C. (2nd Dist.) Rep. pp 656-816 for an able and elaborate discussion of the meaning of the word as used in the rate decisions of the United States Supreme Court. See also *Minnesota Rate Case*, 230 U. S. 446.

"We are here dealing with a corporation entirely intrastate, attempting to interpret and apply our local law. We may observe however, parenthetically, that there is a widespread misconception of, indeed, a manifestly biased attempt to misinterpret, the real meaning of the Supreme Court of the United States in the opinions which deal with fair value in computing what is a reasonable return for the purpose of fixing rates. The refusal of that Court to base a return upon securities issued with little or no regard to the amount of the investment or to the value of the property put at the public service cannot, in our opinion, be fairly construed as a ruling that the capitalization laws of Massachusetts and the necessary corollaries therefrom, are obnoxious to the Constitution of the United States, and are therefore to be disregarded by a regulating commission acting under the laws of this Commonwealth.

"See other cases cited and discussed in Whitten, *Valuation of Public Service Corporations*, p. 82, *et seq.* It is enough now to quote the statement of Commissioner Lane in the *Advances in Rates—Western Case*, XX I. C. C. Rep. 339—where, after reviewing the Supreme Court decisions, he says:

"Notwithstanding these decisions, it remains for the Supreme Court yet to decide that a public agency, such as a railroad created by public authority, vested with governmental authority may continuously increase its rates in proportion to the increase in its value, either (1) because of betterments which it has made out of income, or (2) because of the growth of the property in value due to the increase in value of the land which the company owns.

"What counsel in this case apparently means by 'value' is, the reproduction cost of the property now being used, less depreciation by wear and tear and obsolescence.

#### 311.2—Reproduction Cost New.

"The reproduction cost theory has during recent years become a fashionable one among many attorneys and managers of public service Corporations. Not very many years ago such counsel and managers would have denounced it as utterly confiscatory. It is obvious that in recent years the rise in prices has greatly increased the hypothetical cost of reproducing much of the property used in the public service. Beyond this, particularly in the west, the fair value theory involves capitalizing, as a basis for rate purposes, enormous quantities of land given to the railroad corporations, besides fixing rates high enough to furnish a return upon the unearned increment of land which was originally purchased at a small price. A fair application of this theory to Massachusetts conditions would be to rule that the Boston and Providence Railroad Company is now

entitled to charge fares adequate to make a return upon its right of way into Boston reckoned at the present market values of Back Bay land for residential or business purposes. It would ignore the fact that the railroad originally came into Boston on a right of way consisting of piles driven into a marsh and having, if any, a very small market value. Indeed in the Minnesota rate case (230 U. S. 352) the circuit judge, following the findings of the master, held that the carriers were entitled to a return upon the value of the right of way, taking as its value not only the assumed cost under present conditions, but adding thereto excess values which, as was claimed the railroad ordinarily is compelled to pay whether obtaining land by purchase or under eminent domain (see 230 U. S. 446, *et seq.*) This doctrine was not sustained by the United States Supreme Court. . . .

"It is a matter of common knowledge that in Massachusetts during recent years this reproduction cost theory as a basis for rate-making has been urged on behalf of certain public utility companies, mostly gas companies that have accumulated out of excess earnings or unearned increment upon land values, large amounts of property not represented by the original capital invested or by the stocks and bonds issued under our anti-stockwatering laws.

"Undoubtedly in rate cases and other cases involving the conflicting rights of the rate-paying public and the investing public, the cost of reproduction may frequently be a fact desirable to be ascertained, and sometimes it illuminates important aspects of the problem presented; it is often the best method of checking up unsatisfactory accounting, particularly when dealing with depreciation. But as a fundamentally controlling principle, no theory could work out grosser injustice,—to the rate-paying public in some cases and to the investing public in other cases,—than the reproduction cost theory. In cases where rates have for years been too high, so that the companies have accumulated out of excess rates paid by the public large amounts which have gone for capital purposes, this theory requires the rate-payer to pay a rate adequate not only for a return upon the capital furnished by the investor or stockholder, but adequate also to furnishing capital and a return upon the capital furnished; it would authorize the capitalization of excessive rates and a return upon that capitalization. This is to put a premium upon extortions, past and prospective. On the other hand, this theory is grossly unjust to prospective investors in that even when the investment is made with entire honesty and with reasonable prudence,—yet if, pending the building up to the new business the plant depreciates below the fair cost to the investors, rates must, under this theory be made adequate to make return only upon the reproduction cost of the property in its depreciated condition. This amounts to saying that money lost during the earlier stages of a public service enterprise is *irretrievably* lost by the stockholders; that if, perchance, rates have been fixed so low that the rate-payer has for a period of years obtained a service at less than cost, this is the permanent misfortune of the stockholders—and that the public should never,



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at any time and under any circumstances, be called upon to make up a deficit thus incurred. On this theory copper put into the telephone service at 25 cents a pound is now to be reckoned as worth about half that sum. Every fluctuation in prices involves the ascertainment of a new rate basis.

### 330—Capitalization.

“This theory is as inexpedient as it is unjust. It should never be forgotten that our public utility companies are not finished. They are in process; they are constantly calling for new capital and of recent years in increasing amounts. They must be kept on good trading terms with the investing public or the whole experiment of private ownership and public regulation of these public utility companies will fail. It is as necessary to attract capital into the public service as it is to prevent the mismanagement of these companies or extortion by them. If regulation is to limit (as it should) the profits of stockholders to a moderate return, not greatly in excess of an investment rate, regulation must also protect, so far as it reasonably may, all investments honestly and prudently made and properly managed in the public service; otherwise there will be no such investments. It is entirely clear that in the long run the rate-paying public as well as the investing public will be best served if regulation makes as its *fundamentally guiding principle* an attempt to protect investments honestly and prudently made and wisely managed. Any other theory involves essential injustice, tends to make the development of our public utility companies a speculation and not an investment, operates as a premium upon various kinds of fraud; invites into the public service undesirable manipulators instead of sound, level-headed business managers; makes every rate case an almost interminable and labyrinthine inquiry into values with endless conflicts between so-called experts.

“What the public interests of this commonwealth obviously need is such regulation and such management of our public utilities that the rate-payers may always feel assured that their rates are based upon making a fair and adequate return upon capital which has been invested for their convenience and benefit; that purchasers of the securities may know that within the limits of sound management and reasonable and just regulation, their investments are secure; a system in which a premium is put upon good management and discouraging condemnation is visited upon bad management; a system which is simple and capable of economical and efficient administration.

“These principles are nothing new in the theory of Massachusetts regulation. Partly owing to the limited scope of rate-making power possessed by the Railroad Commission, there has hitherto been little occasion to deal in detail with the principle that investment and not reproduction cost is in Massachusetts the basis of the relation between the rate-paying public and the investing public;

but any other theory will be found, upon an examination of our statutes and of earlier decisions, to be utterly inconsistent with Massachusetts law. From the time of the granting of the earliest charters in this Commonwealth to railroad corporations practically all of our legislation dealing with the rights of public service corporations has gone upon the theory that their capitalization should be limited to actual capital invested and that rates were to be figured upon the capital. Compare many of the earlier statutes granting charters to railroads, most of which contain purchasing powers entitling the Commonwealth to take the property, returning to the stockholders the actual amount invested in the property, generally with a return figured at the rate of 10% per year from the time of the investment. See the charter of the Boston and Worcester Railroad Corporation granted on June 23, 1831, c. 72 sec. 14 (7 S. L. 152); Boston and Providence Railroad Corporation, also granted in 1831, c. 56 sec. 12 (7 S. L. 134); Boston and Taunton Railroad Corporation, 1831, c. 55, sec. 12 (7 S. L. 129); Andover and Wilmington Railroad Corporation, St. 1833, c. 109, sec. 11 (7 S. L. 336), Western Railroad Corporation St. 1833, c. 116, sec. 14 (7 S. L. 344). Numerous other charters contain similar provisions. Subsequently this reserved right of purchase, allowing the investors a return of 10% per year upon their investment, was enacted into the general railroad law, now St. 1906, c. 463, Part II., sec. 6. . . .

"All through the statute law and the earlier decision of this board, runs the theory that the capitalization of a public utility company in this commonwealth is to represent only honest investments; and that such rates are to be allowed as will yield a fair return upon such investments, including, particularly in the earlier legislation, fair or even generous payments for the risks that the investors ran.

"In this fairly consistent adherence to sound principle our Massachusetts public utility code is in striking contrast with the loose and haphazard legislation in many other states, which has frequently resulted in compelling their regulating commissions to resort to reproduction cost as perhaps the least unsafe basis for determining a fair rate.

"Accordingly, we rule that under Massachusetts law capital honestly and prudently invested must, under normal conditions be taken as the controlling factor in fixing the basis for computing fair and reasonable rates; that if there is mismanagement causing loss, such loss must be charged against the stockholders legally responsible for the mismanagement; that reproduction cost either with or without depreciation, while it may be considered, is not under our law, to be taken as the determining basis for reckoning rates. . . ."

#### 352—Expenses.

"The immediate occasion of the petitioner's application for an increase of fares is increased operating expense, due to increased

labor cost,—not a voluntary increase of wages, but the result of an award of a board of arbitration. . . .

“This method of settling wage disputes, by submitting the controversy to an arbitration board, is one clearly entitled to public approval and support. We accept this award as doing no more than justice to the employees; we doubt not that the patrons of this company will likewise accept it and the consequent increased cost of transportation as a proper charge.

“The company’s position is, in substance, that under the old wage schedule its capital was not receiving its living wage; that under the new wage schedule practically nothing will remain out of net earnings for dividends for the stockholders.

“Resolving every reasonable doubt against the claims of the company,—both doubts arising out of the soundness of some of the original investments and doubts arising as to the management on the points hitherto discussed,—the conclusion is irresistible that without an increase of fares earnings adequate for the payment of any dividend cannot reasonably be expected. But both justice and expediency require that capital as well as labor employed in the public service should have its fair living wage. This will be generally conceded. But the difficulty, ordinarily, is in agreeing what the fair living wage of capital is under any given complicated set of circumstances,—involving the original soundness of the investment, the risks of the enterprise fairly assumed by the investors, and the wisdom and disinterestedness of the management. . . .

“An impecunious street railway is a poor public servant; often it is an unsafe public servant. It is most desirable that these passenger carriers should have such income that they may furnish safe, convenient, adequate and comfortable transportation service to their patrons. Such service the public wants, and is willing to pay for when convinced that it is paying only for what it gets.”

## INDIANA

### 300—Investment and Return.

W. C. BIERHAUS ET AL. VS. VINCENNES WATER SUPPLY COMPANY, Alleging that the Company’s Rates are Unreasonable. Decision of the INDIANA PUBLIC SERVICE COMMISSION, Fixing Rates. November 11, 1914.

The valuation approved by the Commission is set forth in the decision together with the contentions of the company for a change in various items fixed in the tentative valuation. Practically no discussion is given regarding disputed items in the valuation.

### 314—Overhead Charges.

An allowance of 12% of the value of the physical property is made for superintendence, engineering, etc., during construction.

**315.1—Going Value.**

An arbitrary amount was allowed as the going value of the property. The allowance, \$25,000, is practically 8% of the value of the physical property.

**318—Working Capital.**

The allowance for working capital is approximately 10% of the total revenue.

**340—Rate of Return.**

Seven per cent is allowed as return on the investment.

**510—Forms of Rates.**

The company had in effect numerous flat rates and a step meter rate. The Commission finds that the rates are discriminatory and orders in meter rates of the block type.

## REFERENCES

### RATES

**400—Rate Theory.**

RATE MAKING, by GEORGE C. SHAAD. A paper read before the Kansas Gas, Water, Electric Light, and Street Railway Association at its Seventeenth Annual Convention, Arkansas City, Kansas, October 22-24, 1914.

An earnest attempt should be made to determine a proper and equitable basis for rate making. Rates and forms of schedules, justified only by business expediency and individual judgment, will not always withstand the investigation of rate regulating bodies, although they may be, on the whole, remarkably fair to all customers. In illustration, a particular case is taken, and rates are determined for the different classes of service, following the method and form of rates used by the Wisconsin Commission.

## PUBLIC SERVICE REGULATION

**200—Public Service Regulation—Law and Practice.**

WHAT REGULATION MUST ACCOMPLISH IF IT IS TO BE PERMANENT, by JOHN M. ESHLEMAN. Read Before the Conference of American Mayors on Public Utilities, Philadelphia, November 12 to 14, 1914.

Commissioner Eshleman of the California Railroad Commission discusses very fully fundamental problems of public service regulation, present and future. It is the opinion of the Commissioner that, in the case of a natural monopoly, proper regulation may always produce better service at lower rates than can possibly be afforded under competition, and that therefore, the first requirement that regulation must meet is that it produce better results than can be produced by competition else it goes down before competition and we must return to a condition of competition between utilities. In this connection a complete discussion is

given of the policy of the California Commission in regard to protection from competition. The second proposition in determining the permanency of the present plan, is that privately owned utilities must be able to stand every comparison that is made with publicly owned utilities. Private operation of public utility business, in contending for every element of value that may be enforced, opens the way for agitation for public ownership. The opinion is stated, therefore, that regulation cannot remain permanent unless the utilities are willing to meet every comparison, and show that the balance is at least not against them in such comparison, with publicly owned and operated plants and that in doing so they must be limited to equitable demands else they will inevitably be called upon to compete with governmentally owned properties. It is pointed out, in conclusion, that local regulation of utilities is ineffectual and biased, and has not attained the results secured by state regulation.

### **786—Tests and Accuracy of Meters.**

FEES FOR ELECTRIC, MAGNETIC, AND PHOTOMETRIC TESTING, Circular of the BUREAU OF STANDARDS, No. 6. 27 pages.

This circular contains information regarding the testing of electrical measuring instruments, resistance, electromotive force, capacity and inductance, magnetism, radium and photometry. Instructions are given regarding applications for tests and a schedule of fees charged for the different tests is included.

## **MUNICIPALITIES**

### **810—Municipal or Local Regulation of Utilities.**

THE REGULATION OF MUNICIPAL UTILITIES, by NATHANIEL T. GUERNSEY. Read Before the Conference of American Mayors on Public Utilities, Philadelphia, November 12 to 14, 1914.

State regulation of municipally, as well as privately, operated utilities is preferred to local regulation. The decisions of local tribunals can never inspire confidence. A decision in favor of the public is immediately criticized as due to political considerations. A decision against the public arouses suspicion as to considerations of a different character, and a compromise is criticized as political. Moreover, members of city councils cannot, in the very nature of things, acquire the special knowledge and experience necessary to the correct determination of the many varied, intricate and important questions which arise out of the regulation of public utilities. There has been criticism, much of it unjust, of the participation of public utilities in municipal politics. The utilities do not belong in politics; where they are in politics, it is not of their own volition, but because conditions beyond their control have forced them in. Their regulation by city authorities must inevitably bring them into intimate relations with every political faction in the community. This always has been, and always will be one of the results of municipal regulation. The local self-government argument is not a sound one. The public interest does not require the local authorities to do things which may be better done by others.

### **840—Public Operation.**

PROCEEDINGS OF THE BOARD OF TRUSTEES OF THE SANITARY DISTRICT OF CHICAGO. November 12, 1914. 179 pages.

The report of the Commission on Sewage Disposal and Water Power Development is presented. The report contains a digest of all the data available for the

consideration of the Commission, compiled from the records of the Sanitary District and other sources, and is intended to be exhaustive of the pertinent information so far as capable of exhibit and analysis.

## GENERAL

### 950—Progress in the Art.

A CONSTRUCTIVE POLICY FOR PUBLIC SERVICE CORPORATIONS, by CHARLES DAY. Read Before the Conference of American Mayors on Public Utilities, Philadelphia, November 12 to 14, 1914.

The constructive policy outlined is predicated upon the existence of governmental regulation and the writer shows a belief that the principle of regulation is inherently sound and that results secured have demonstrated its practicability. A constructive policy as outlined urges the attainment of maximum operating efficiency and the keeping of adequate records and information which will make possible the compilation of data relating to the operation of many corporations. Such information will afford a sound basis for the establishment of standards for rate making and other disputed questions.

### 960—Co-operation

PHILADELPHIA'S TRANSIT PROBLEM, by A. MERRITT TAYLOR. Read Before the Conference of American Mayors on Public Utilities, Philadelphia, November 12 to 14, 1914.

Mr Taylor, director of the Department of City Transit, Philadelphia, outlines the "program" which the city has adopted in providing for adequate transportation service. The importance of securing co-operation between the company and the city is emphasized. In conclusion, the writer says: "We do not expect the existing company to co-operate with the City in establishing the rapid transit lines in a manner which will reduce its existing net income. . . . We recognize the vital importance of honestly protecting capital invested in Philadelphia to the extent that it shall produce an attractive return for reasonable service rendered to the public. . . . We want Philadelphia to stand out as a safe place for the investment of capital for public service. We recognize the great part which the railroads and other public service corporations can take in the development of this city and its industries, but to so take this part they must have credit upon which to raise large sums of money, and they must be assured of an adequate and attractive return thereon and immunity from unwarranted competition or political and public attacks. The capitalists of this country are going to invest their money in communities where capital is justly treated and permitted to earn attractive returns, and are not going to invest capital in communities where its security is impaired and its productiveness is unduly curtailed by unreasonable legislation, regulation or competition. I believe that the time is past when corporations, through political, financial, or other influence, can retard the development of the resources of our great cities, make unfair bargains for franchises, or refuse to co-operate upon just terms in carrying out great municipal developments and undertakings which are dependent upon their co-operation. On the other hand, I believe the time is at hand when cowardly public officials will not be permitted by the thinking public to be led by blackmailers and demagogues into imposing unreasonable and onerous terms and conditions upon corporations and vested interests; they will no longer be able to make political capital by pursuing any such course in an enlightened community."

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
REPORT ON ELECTRIC RATES . . . . .		147
Cincinnati, Ohio . . . . .		147
COURT DECISIONS . . . . .		150
Wisconsin . . . . .		150
COMMISSION DECISIONS . . . . .		153
New Hampshire . . . . .		153
Wisconsin . . . . .		155
California . . . . .		156
REFERENCES . . . . .		157
Investment and Return . . . . .		157
Municipalities . . . . .		158
General . . . . .		159
Court Decision References . . . . .		159



# Rate Research

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Vol. 6

CHICAGO, DECEMBER 3, 1914

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## REPORT ON ELECTRIC RATES

### CINCINNATI, OHIO

#### 300—Investment and Return.

Report on the Valuation of the Property and the Electric Rates of the UNION GAS AND ELECTRIC COMPANY, Cincinnati, Ohio, by ARTHUR C. KING. November 7, 1914. Begun in 6 RATE RESEARCH 131.

#### 540—Minimum Charge.

The report shows that under the existing rates the minimum bill of \$1.00 (gross) for residence business is approximately correct while the minimum of \$1.00 (gross) per kilowatt of maximum is higher than actual cost for retail commercial lighting and power. It is stated, however, that a reduction in the minimum charge corresponding to the reduction in rates may perhaps, not be disadvantageous to the company.

#### 600—Rate Differentials.

"The question naturally arises as to the reason of different rates for various classes of service, such as residence, retail and wholesale commercial lighting, retail and wholesale power. In general the use of electricity for power extends over longer periods during the 24 hours, and the consumption of current is much more evenly distributed throughout the year, while the average power installation is larger than that for lighting. These facts, together with the fact that a power load utilizes to a considerable degree investment which might otherwise be idle for a longer period during the 24 hours, are the reasons for a somewhat lower rate for power. The more general use of electricity for varied purposes both domestic and commercial is gradually eliminating the differentiation between its uses for lighting and power with the result that in some of the larger cities, the distinction in rates and classification between light and power is disappearing. Ultimately, there will be no reason for such differentiation.

"In establishing its rates an electric company must constantly bear in mind that while it may have a monopoly for the general supply

of electricity for light, power and other purposes, it has active competition in the lighting field from oil and gas and for the supply of power from gas, oil and steam engines. This competition is especially severe in the case of large users of light and power, the character of whose service is such that unless they can obtain a low rate from the electric company, they can better afford to furnish their own service. In Cincinnati cheap coal and natural gas render this competition a much greater obstacle to the rapid development of central station service than in many other cities.

"The owners of a utility are concerned with, and are constantly striving to obtain the greatest net earnings possible, and differentiation in rates established is with that end in view. Under public regulation it is a direct advantage to the individual user as it enables the utility to obtain the maximum amount of net earnings per dollar of investment, which must lead to a reduction in rates benefitting all classes if the company is limited to a reasonable return on its investment.

"While the establishment of a classification is in practice determined to a certain extent by expediency, each class should have well defined characteristics which warrant its separation from others, and the rate for that class should have as close a relation as possible to the cost of serving the class. In serving any class of customers, there will be some who are served at a loss, but the class as a whole must return a profit to the company. This is particularly true in the case of the small retail consumer. It is also evident that any concessions which may be made to those customers who can afford to furnish their own service, in order to build up the business and improve conditions of operation, should impose no additional burden on other consumers, particularly those compelled to pay the maximum rate.

"In a few rate investigations an approximate apportionment of the investment, as well as expense between different classes of service has been attempted. These cases have generally been confined to the smaller cities with little diversification of business.

"The proper distribution of investment requires among other data a knowledge of the following factors; ratio of maximum demand to connected load and to average load for each class of business; time of day and of the year when the maximum demand occurs; diversity between consumers of each class and between different classes; diversity between different portions of the distribution system, as for example, between different substations, different feeders from the same sub-station, different transformers on the same feeder and different consumers on the same transformer.

"In this instance sufficient data is not available to render either the apportionment of investment or expense practicable. The general scheme of rates at present in force is in line with the generally ac-

cepted theory of electric rates and an adjustment of the maximum rate made on a proportionate basis would be equitable."

#### 610—Forms of Rates.

The report points out that the expense of furnishing any public utility service can be divided between fixed and variable expense and customer expenses, and that the rate schedules should be made to cover these costs without discrimination between customers. Flat rates for electric service are discriminatory.

"The method most commonly used to meet the requirements consists in charging a certain primary rate per kilowatt hour for the consumption in any one month equivalent to a certain number of hours use of the customers' maximum demand, and a lower or secondary rate for the balance of the kilowatt hours consumption. In certain instances a third or tertiary rate applies after the consumption exceeds the equivalent to a certain number of hours use of the maximum in excess of that number to which the primary and secondary rates apply. These rates are usually determined from the calculated costs of service, modified somewhat to meet practical conditions. These principles are embodied in the rate schedules of the Union Gas and Electric Company, now in effect, although they are not so simple and easily understood by the general consumers as the form of schedule above mentioned."

#### 750—Comparative Company Data.

"In order to obtain satisfactory comparisons between rates in Cincinnati and other similar cities, monthly schedules of residence lighting, retail commercial lighting, and retail power, covering a period of twelve months were compiled. These schedules approximated the average of Cincinnati consumers in the three classes and were as follows:

	Connected Load.	Av. K. W. H. per Month
Residence Lighting.....	875 Watts	27
Retail Commercial Lighting...	1033   "	109
Retail Power.....	2610   "	137

"These schedules were calculated on the basis of rate schedules of twenty-six of the largest cities in the country with the following results as compared with Cincinnati.

	Cents per K. W. H.			
	Max.	Min.	Aver.	Cincinnati
Residence Lighting.....	11.80	5.52	8.29	8.34
Retail Commercial Lighting.	10.48	3.97	7.20	5.91
Retail Power.....	9.50	3.60	5.97	7.34

## COURT DECISIONS

### WISCONSIN

#### 831—Purchasing by Municipality.

OSHKOSH WATER WORKS COMPANY V. WISCONSIN RAILROAD COMMISSION, Decision of the DANE COUNTY CIRCUIT COURT, Upholding the Decision of the Commission as to the Price to be Paid by the City in the Purchase of Water Works Property. October 26, 1914.

The Commission by decision, September 27, 1913, fixed the amount to be paid by the City of Oshkosh for the purchase of the company's water works property. The company brought action in the circuit court of Dane County alleging that the compensation is inadequate and the terms and conditions are unreasonable.

The court confirms the findings of the Commission in every particular and finds that the terms and conditions of sale fixed by the Commission are reasonable.

#### 310—Valuation.

The summary statement of the court is as follows:

"Value is of necessity a matter of opinion. The evidence offered to overturn the award of the Commission consists of the opinions of witnesses. The difficulty of offering anything definite on the question of what allowance should be made for going value is shown by the fact that the plaintiff's witnesses who testified in this court fixed this allowance all the way from \$70,000 to about \$210,000.

"We must constantly keep in mind the fact that just compensation is not found by adding up separate sums, but by taking a comprehensive view of the whole property, tangible and intangible.

"The plant has been a success financially. From the start the company was assured of hydrant rentals that paid in excess of 5 per cent on the entire amount expended upon the plant up to the time of the second annual meeting. These hydrant rentals increased in amount, and the income from private consumers soon rose to an amount that added largely to the revenue from hydrant rentals. While there was difficulty at times in collecting these hydrant rentals, yet the history of the plant was such as to warrant the Commission in considering the opportunity which the plaintiff had to 'recoup initial losses and make a reasonable profit for the whole period.' 12 W. R. C. R. 666.

"It appears that the Commission carefully weighed all the various factors or elements of value which should be considered in fixing

just compensation. It does not appear that the Commission acted on any mistaken basis in making its award. The award must be confirmed."

The amount of the award exceeds the valuation of the physical property as accepted by the plaintiff by a sum in excess of \$68,000.

### **312.9—Paving Over Mains.**

"The sum of \$68,000 includes an allowance for the cost of opening up and replacing paving over mains, most of which paving has been laid without expense to the company since the mains were replaced in the ground. This item was properly considered by the Commission because of the fact that in order to duplicate the plant at this time this paving would have to be taken up and relaid. But in determining what is just compensation, the Commission had a right to consider the fact that the Company did not own these pavements and that the laying of the pavements since the installation of the mains has not added to the amount which the plaintiff has invested in its plant."

### **315.1—Going Value.**

"It does appear affirmatively that the Commission considered going value as an important element in fixing compensation, and that it considered all the tangible and intangible elements of property together and as one harmonious entity in fixing the amount of such compensation. 12 W. R. C. R. 664.

"The chief basis for the argument that the Commission did not make a sufficient allowance for going value is found in the fact that the present value of the plant, including paving over mains is fixed at a sum which is within about \$14,000 of the amount of the total compensation. The same situation was presented in the Appleton case, where the Commission adopted the report of the engineers fixing the present value of the physical property within a few thousand dollars of the total amount allowed as compensation for the plant. The decision of the court in the Appleton case is controlling in the the case at bar.

"The value of the plant and business is an individual gross amount. It is not obtained by adding up a number of separate items but by taking a comprehensive view of each and all of the elements of property, tangible and intangible, including property rights, and considering them all not as separate things, but as inseparable parts of one harmonious entity, and exercising the judgment as to the value of that entity. In this way the going value goes into the final result, but it would be difficult for even an expert to say how many dollars of the result represent it."

### **315.4—Bond Premium.**

"As to the provision of the bonds with reference to the payment of a premium; if the company is under obligation to pay this premium,

it arises out of its contract with its bondholders which was in force at the time that the company elected to accept the indeterminate permit.

"The advantages or disadvantages which accrued to the company from its election to surrender its franchise and accept this indeterminate permit are not matters of concern in this action, but when the company accepted the indeterminate permit, it consented that the city might acquire its property at any time upon payment of the compensation fixed by the railroad commission. The company knew the effect of its contract with its bondholders as to the payment of the premium when it accepted the indeterminate permit and thereby gave the city the right to acquire its plant at any time. Any questions that may be raised as to the liability to pay the stipulated premium are questions that must be settled by the company and its bondholders. The value of the plant is not affected by the fact that the company may agree to pay a premium for its money, any more than it would be if the company could discount for the payment of its bonds for cash because of the present state of the money market.

"The statutes providing for purchase of such plants by municipalities nowhere refer to the purchase of an equity of redemption. There is no provision which seems to contemplate the purchase of the mere interest of the mortgagor in such plant. The statutes everywhere refer to the 'property of such public utility actually used and useful' and end by providing that when the provisions of the statute as to fixing and certifying compensation have been complied with that 'the exclusive use of the property taken shall vest in such municipality.' Sec. 1797 m-82. If it had been the intent of the legislature that the municipality should require only a mortgagor's equity of redemption, there would have been no necessity for notice to the bondholders (Sec. 1797 m-82), or for the provision allowing bondholders to maintain an action to alter or amend the order of the Commission (Sec. 1797 m-83), for any determination made by the Commission would not affect the rights of the bondholders and they would have no interest in the amount of compensation fixed by the Commission.

"Construing the statute as one which passes title to the entire property rather than the equity of redemption, it does not violate the obligations of the contract made with the bondholders. This contract expressly provides that the bonds may be paid before maturity. The franchise which gave the company its right to build the plant, by its express terms gave notice to the bondholders that the city might acquire the plant before the maturity of the bonds.

"The obligation to pay the premium, if any exists, is like any other obligation incurred by the company in securing the money to build the plant or in operating its business. The public utility law 'authorizes the municipality to acquire nothing but the *property*

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of the public utility. It does not authorize it to acquire the corporation itself or its obligations or to incur any indebtedness on account of any liability of the corporation. The statute limits the municipality strictly to the acquisition of the property of the public utility.' *Green Bay & M. C. Co. v. Kaukauna G. E. L. & P. Co.* 157 Wis. 412,417. This statement of the law is in no way in conflict with the further statement of the court in that case, that the municipality must take the property 'subject to all valid liens thereon' relied upon by plaintiff. The word 'lien' is there used in its strict legal sense, which distinguishes it from the property in the thing mortgaged which is conveyed by a trust deed. See *Russell v. Harkness*, 4 Utah 107, 7 Pac. Rep. 865,866.

"The conclusion which the court has reached renders unnecessary any consideration of the question of whether jurisdiction of the bondholders was secured by the publication. . . ."

### **380—Taxation.**

"The taxes were assessed against the plant as personal property as of the date of May 1st. The company continued to manage the plant and collect the income therefrom up to the following October. After October 1st the company is entitled to interest on the amount of the purchase price. This change in the form of the property does not deprive the company of its income therefrom. The company still had the property and the income from it, and it ought to pay the tax assessed against its property. . . ."

## **COMMISSION DECISIONS**

### **NEW HAMPSHIRE**

### **300—Investment and Return.**

Investigation of the Rates of the MANCHESTER STREET RAILWAY. Decision of the NEW HAMPSHIRE PUBLIC SERVICE COMMISSION. November 20, 1914.

This investigation was conducted under the provisions of chapter 120 of the Laws of 1913. The law required the Commission to investigate the value of the property of the street railway company to determine whether or not a reduction in rates to school children and to the general public during certain rush hours is justifiable. The Commission orders the special rates to school children which will make no appreciable change in the company's revenue, but finds there is no margin which would justify the reduction to the general public.

"The company's stockholders are now earning barely a fair return upon the value of their property devoted to the public use. Any substantial reduction in that return would be a plain violation of the terms of the statute under which this investigation has been conducted. . . .

"It is interesting to note that the increase in taxes from \$15,600 assessed in 1912 to \$23,925 assessed in 1914 has reduced the net income of the company by almost exactly the amount of reduction which would be affected by putting in force the reduced rates during the morning hours. What the public does not get in reduced rates it gets in another form, in increased taxes."

### 315.1—Going Value.

"In the general outcry against inflated capitalization there is never found a suggestion that a public service corporation, well planned and efficiently managed, should not be allowed a fair return upon at least the full amount of its *bona fide* investment.

"This company was justly entitled to earn a fair return upon its investment, and enough more to keep that investment good. It has been unable to do so, at the rates which it has charged, and has suffered a substantial loss as the result of its operations. And justice requires that it be given an opportunity to make that loss good.

"Technically, depreciation should be made good out of earnings. But it is out of the question for this company to make good out of its earnings a loss of \$250,000. It could only be done by increasing rates. And an increase in the five cent fare in the city of Manchester is not seriously to be considered. Neither the company nor the public would desire it.

"We, therefore, find that justice to the company, and the public good alike, require that the deficiency in the present depreciated value of the company's property below the amount actually invested by the stockholders be regarded as a cost of developing the business, and as such added to that depreciated value to determine the present fair value of the company's property devoted to the public service; and that the company should hereafter be allowed to earn annually a fair return upon \$1,402,750, the amount of its *bona fide* investment, which fair return is found to be six per cent, together with a sum sufficient to take care of the annual depreciation of its property."

### 319—Land.

It appeared that the total cost of the property was approximately \$1,500,000, on which there had been about \$450,000 of depreciation, and that while this depreciation has been accruing, the land has been increasing in value by an amount estimated at \$100,000.

"It is at least questionable, however, whether we should accept as the true standard of present value the basis upon which the land



has been valued in this case. If cost of reproduction new were the final measure of present value, it would, of course, in the case of land occupied by buildings, be necessary to determine what the land would cost standing unoccupied, and to add to that cost the expenses of erecting the buildings standing upon it. But as we have repeatedly held, cost of reproduction new does not conclusively determine present value. It is merely evidence of that value, to be considered in connection with a great number of other significant facts.

And it is at least open to question in the present case whether the present fair value of land and buildings, upon which the company is entitled to earn a return, is to be found by adding together what the land would cost if standing vacant in the market to-day, and the cost of the buildings, new or less depreciation. If the amount of the beneficial use of which the company is deprived by continuing this property in the public service is the true measure of the sum upon which it is entitled to earn a return,—and upon this theory is apparently based the doctrine that it has a right to a return upon increased land values,—it is at least arguable that the sum which it could realize by withdrawing the land and buildings from the public service, rather than the sum which they would cost if now for the first time devoted to that service, is the present fair value. On that basis, as the buildings, being of a specialized type and unsuitable for other use, would have to be sacrificed to make the land available, it would seem that their present value, plus cost of removal, and less scrap value, would have to be deducted from the present market value of the land to determine how much could actually be realized from its sale, and how great was therefore the sacrifice of the company through continuing it in the public service. If this theory were adopted, the present fair value of land and buildings would be about \$80,000 instead of \$160,000.

“But for the decision of this case it is immaterial which value is placed upon the land. And, without deciding the question, it will be assumed in our future discussion that the present fair value is \$160,000 as estimated by the real estate experts who appeared as witnesses.”

### **WISCONSIN**

#### **840—Public Operation.**

Application of the MUNICIPAL ELECTRIC UTILITY OF SUN PRAIRIE (Pop. 1,119), For authority to Adjust Rates, Decision of the WISCONSIN RAILROAD COMMISSION, Fixing Rates. September 21, 1914.

An application was made for an adjustment of rates of the Sun Prairie municipal electric utility. It was stated that the consumers considered

the present rates too high, and that by a decrease in rates the plant would be able to get new customers as well as to sell more current to present customers for purposes of cooking and heating. It was found that about \$23,000 is a fair value of the property for rate making purposes.

**340—Rate of Return.**

“An allowance of 1% of the fair value or \$230 should be made for taxes in order to maintain an equitable relationship between consumers and taxpayers. In this instance, as a request was made for an interest allowance only large enough to pay interest on the indebtedness of the plant 5% of the fair value has been used in our computations as a reasonable rate of return.”

**360—Depreciation.**

“In determining the amount to be set aside for depreciation, a computation was made showing that the depreciable property of the company has an average of 17.5 years, and that \$963 placed each year in a fund bearing 4% interest would be sufficient to replace this property as it is worn out.”

**720—Rate Schedules.**

The present commercial lighting schedule has a rate of 18 cents per kilowatt hour scaled down to 8 cents and takes nothing into consideration but the amount of current consumed. New rates were prescribed in the usual form used by this Commission, which takes into consideration the connected load of the consumer. The primary rate is 14 cents net or 15 cents gross per kilowatt hour for current used equivalent to or less than the first thirty hours' use per month of the active connected load.

## **CALIFORNIA**

**226.2—Extension of Service.**

S. RANEY ET AL VS. SAN JOAQUIN LIGHT AND POWER CORPORATION, Application for Service Requiring Extensions. Decision of CALIFORNIA RAILROAD COMMISSION, Fixing Terms and Requiring That the Extensions Be Made. October 13, 1914.

The Commission ordered the company to make the extension to serve the complainants at its own expense provided that a certain number of customers contract for the service at the present rates guaranteeing a certain annual revenue from the extension. The Commission says:

“Under the existing rates of the company it appears that certain of the complainants refuse to contract for service, but request that the Commission put the rates on an equitable basis, and it does not ap-

pear entirely clear as to whether or not certain other complainants are willing to take electric energy from the defendant corporation at the existing rates pending a final adjustment thereof by the Commission. Considering the fact that the Commission has made no investigation involving the present rates of defendant, it would of course be impossible, upon the evidence introduced thus far, to order the extension of defendant's lines and facilities to serve complainants upon any other than the rates and regulations legally in effect. On the other hand, the evidence shows that defendant has constructed its lines on all sides of the district involved in this case, including the town of Hardwick, in such a manner as to preclude the possibility of profitable operation by any other utility which might be willing otherwise to enter the field. Under the circumstances it is clearly the duty of defendant to serve the entire territory dependent upon it for such service, irrespective of the fact that certain districts may be less profitable than others."

**410—Cost of Service.**

"Obviously the rates for electric energy are not based on the cost of service to each individual consumer, but are based rather upon the average cost of serving all consumers of a given class, and while it must be admitted that the business of defendant when considered as a whole cannot be conducted at a loss, it does not necessarily follow that investments to serve individual consumers or groups of consumers will show the same percentage of profit. Rates based upon any other theory would result in special rates to each consumer, which is entirely impracticable from an operating point of view and would necessitate the constant revision of rates to avoid serious discriminations."

The question of rates for this district are under consideration in another case, and no order regarding rates is made in this case.

## **REFERENCES**

### **INVESTMENT AND RETURN**

**330—Capitalization.**

SAVINGS BANK BONDS IN THE LIGHT OF RECENT DEVELOPMENTS, by ARTHUR M. HARRIS. *The Commercial and Financial Chronicle*, American Bankers' Convention, Section II. October 24, 1914, p. 164.

In regard to investments in public service companies the writer, after discussing briefly railroad and street railway securities, says: The principal other classes of public service corporations are gas, electric light and power companies, including the increasingly important hydro-electric developments. The best representatives of these public utilities furnish a most stable basis of security. Practically unaffected by industrial depression and practically free from all the ill effects of competition by the fact of their being natural monopolies, the leading public utilities of this country have grown rapidly in favor with conservative investors during the last ten years.

**330—Capitalization.**

Argument of HOWARD S. GRAHAM, of Investment Bankers' Association of America. Before the INTERSTATE COMMERCE COMMISSION in re-Revenues of Rail Carriers in Official Classification Territory on Petition for Modification of Order.

Railroad financing is discussed from the standpoint of the investor. The continued and growing distrust of the investor in railroad securities is noted, and it is urged that independent of commercial activity or depression, the freight rates accorded the Railroads should be such as to permit them not only to maintain a sound and permanent basic line of credit, in order to hold continuous confidence in their various classes of securities, but to encourage new capital for future financing requirements. This can only be accomplished by ability to demonstrate the stability of Railroad properties under varying conditions and to enable the stock of Railroads to become more desirable by an enhanced earning capacity.

**391—Reports of Companies.**

CORPORATION AND PUBLIC SERVICE COMPANIES Sections in *The Economist*, Panama-Pacific Section, November 28, 1914, pages 129 to 161.

Securities and reports of public service companies of the Pacific Coast are given in the Corporation Section of this special number, and additional statements of various utilities are given in the Public Service Companies Section.

## **MUNICIPALITIES**

**840—Public Operation.**

SANITARY DISTRICT HYDRO-ELECTRIC FACTS AT LAST. *Weber's Weekly*, November 28, 1914.

The article reviews and explains the more important features of the investigation and report of the sanitary district hydro-electric expert commission, and points out that the report fully sustains statements heretofore made in *Weber's Weekly*, concerning sanitary district waterpower mismanagement.

**840—Public Operation.**

LIST OF PUBLICATIONS PERTAINING TO GOVERNMENT OWNERSHIP OF RAILWAYS. BUREAU OF RAILWAY ECONOMICS. Bulletin No. 62. 1914. Pamphlet, 93 pages.

In the preparation of this bibliography the intention has been to include references to all the available literature on the subject for and against government ownership. Lists of references are given on the Panama railroad and public operation in Alaska, Georgia, Illinois, Massachusetts, North Carolina, Oklahoma, Pennsylvania and Texas; and the foreign countries of Great Britain, Germany, Austria-Hungary, France, Canada, Belgium, Switzerland, Russia, Mexico, Japan, Italy, Africa and others.

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## GENERAL

### 190—General History of Electric Utilities.

THE PUBLIC UTILITIES OF THE PACIFIC COAST, by C. L. CORY. *The Economist*, Panama-Pacific Section, November 28, 1914, p. 57.

The conditions governing the electric and other public service companies, operating on the Pacific Coast, are set forth, and the difference in the problems in these industries in the West, as compared with the East, is carefully analyzed.

### 731—Electric Definitions.

THE RELATION OF THE HORSE-POWER TO THE KILOWATT. BUREAU OF STANDARDS, Circular No. 34. August 1, 1914, 16 pages.

The value of the "horsepower" may be expressed either in gravitational or in absolute units of power. Confusion often results when one equivalent is reduced to the other, since the gravitational units depend on the force of gravity, which varies from place to place; and the absolute units do not. The different standards and definitions of the horsepower in the United States and in Europe are tabulated and the importance of adopting an invariable unit of power is discussed.

### 920—Economy and Efficiency.

PRACTICAL ECONOMIES IN DISTRIBUTION WITH THEIR EFFECT ON THE COMMERCIAL POLICY OF A CENTRAL STATION COMPANY, by HAROLD GOODWIN, JR. 16 pages. *General Electric Review*, December, 1914, p. 1159.

The importance of giving more careful attention to the reduction of the cost of distribution is discussed and theory and practice are brought to bear upon the problem. A comparison of the merits of the radial and the tree systems is made; load capacity data of the secondary distributing lines are given in tabular form; and cost data of line materials and their erection are presented, also in tabular form.

## COURT DECISION REFERENCES.

### 380—Taxation.

PACIFIC GAS & ELECTRIC CO. v. ROBERTS, State Treasurer, et al. Decision of the CALIFORNIA SUPREME COURT. October 1, 1914, 143 Pacific 700.

Const. art. 13, §14, imposes a gross earnings tax on gas and electric light companies and declares that such taxes shall be in lieu of all other taxes and licenses, state, county and municipal, on the property enumerated of such companies, except as otherwise provided in such section. The court holds that such exemption should not be limited to ad valorem taxes imposed on the property of such corporations, but should be construed in accordance with its language, and exempted such corporations from liability for license fees imposed by Motor Vehicle Act (St. 1913, p. 641) §§ 4, 5, in so far as it attempted to impose such fee on vehicles used by such corporations exclusively in their business, as a condition to the requisite registration under the act.

**112—Franchises.**

PEOPLE ex rel HUBBARD v. LOS ANGELES RY. CORPORATION. Decision of CALIFORNIA SUPREME COURT. October 1, 1914. 143 Pacific 739.

The court holds that where the company has a franchise ordinance for the construction of a street railroad line, which provided that if the road was not fully completed and in operation within 18 months after the passage of the ordinance the franchise should be forfeited as to the uncompleted portion thereof, failure to complete the entire line does not affect the validity of the franchise for the portion completed within the time fixed.

**783—Safety of Service.**

DYGERT v. CITY OF EUGENE ET AL. Decision of SUPREME COURT OF OREGON. July 28, 1914. 143 Pacific 643.

The city of Eugene strung one of the wires from its electric light plant, carrying 2,200 volts, across and only three inches above, a line of the Oregon Power Company, carrying approximately 120 volts. An accident resulted from the contact of the two wires caused by the sagging of the city's high power line. In an action against the city and the company, the court held both liable in that both contributed to the injury, the city by active negligence and the company by passive negligence. The court further stated that, in a proper action, the company might recover from the city any sum it is compelled to pay in damages, on account of the city's prior negligence.

**783—Safety of Service.**

KANSAS CITY SOUTHERN RY. CO. v. REDWINE ET AL. Decision of SUPREME COURT OF OKLAHOMA. October 13, 1914. 143 Pacific 847.

The court reverses an order of the Corporation Commission requiring the railway to change the location of its depot. That part of the Commission's order requiring a better depot is sustained, but the court holds that the safety of the traveling public and the employees would be best served by the location of the depot as proposed by the company.

**810—Municipal or Local Regulation of Utilities.**

ECONOMIC GAS CO. v. CITY OF LOS ANGELES et al. Decision of CALIFORNIA SUPREME COURT. October 31, 1914. 143 Pacific 717.

The city of Los Angeles established by ordinance a rate of 80 cents per thousand cubic feet as the amount to be charged for gas furnished by the Economic Gas Company. The ordinance forbade any departure from these rates, except by permission of the board of utilities. The company without permission of the board instituted a prompt payment discount. The court holds that this action was illegal. The company contended that the city's power is merely to fix a maximum rate. The court says:

"We cannot agree with this contention. One of the purposes of regulation is to exclude favoritism to an individual or a class. If the legislative body of a city might only fix a maximum rate, it might be possible for a corporation to reduce its charges, in some form or another, to a point which would drive a competitor out of business and, after accomplishing that result, to resume the maximum charge permitted by law.

"It is contended that the city's police power extends only to the protection of the consumer. But regulation involves more than that. It includes the power to prevent ruinous competition among the producers as well as unjust charges to the consumers."

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
<b>RATES</b>		
United States Reclamation Service		163
<b>COMMISSION DECISIONS</b>		165
Pennsylvania		165, 166, 167
Colorado		168
California		168
Washington		168, 169
<b>ANNUAL REPORTS</b>		169
Ontario, Canada		169
<b>COURT DECISIONS</b>		170
Arkansas		170
Ohio		171
<b>REFERENCES</b>		173
Investment and Return		173
Public Service Regulation		173
Municipalities		174
General		175
Court Decision References		176



# Rate Research

Vol. 6

CHICAGO, DECEMBER 10, 1914

No. 11

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### UNITED STATES RECLAMATION SERVICE

#### 720—Rate Schedules.

Abstract of Schedule of Rates for Electric Current under the Standard Contract for Electric Power on the Minidoka Project, State of Idaho. United States Reclamation Service, Department of the Interior.

#### LIGHT, POWER AND APPLIANCE RATES.

Apply to energy used for all purposes unless special provision is made to take advantage of lower rates for heating rooms and buildings.

##### Rate.

\$2.00 per month per kilowatt for 50 hours use of maximum demand.  
3 cents per kilowatt-hour from 50 to 100 hours use of maximum demand.  
2 cents per kilowatt-hour from 100 to 150 hours use of maximum demand.  
1 cent per kilowatt-hour from 150 to 300 hours use of maximum demand.  
 $\frac{1}{2}$  cent per kilowatt-hour over 300 hours use of maximum demand.  
25% additional during June, July and August.

##### Quantity Discount.

Quantity discount varies from 2% for a 2 kilowatt load to 30% for 100 kilowatts and over.  
10% discount if energy is delivered and metered at 2,200 volts.

##### Determination of Maximum Demand.

Maximum demand is based on 15-minute peak as shown by demand meters.

##### Minimum Charge.

The rate is equivalent to a charge of 4 cents per kilowatt-hour for the first 50 hours use of maximum demand with a minimum charge of \$2.00 per month.

##### Terms and Conditions.

$\frac{1}{2}$  kilowatt is the smallest quantity contracted.

#### SPECIAL HEATING RATES.

Apply only from September 1 to June 1 to power that is separately metered and used solely for heating rooms and buildings.

##### Rate.

\$1.25 per kilowatt per month at 220 volts.  
.75 per kilowatt per month at 2,200 volts.

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EDITORIAL NOTE.—All indented matter is direct quotation.

**Minimum Charge.**

Each heating device connected must be paid for for a minimum period of four consecutive months.

Or as an alternative a demand meter may be installed to show the greatest load used each month. In this case the maximum for the season must be paid for for at least four months.

**580— Terms and Conditions.**

The standard contract form used by the United States Reclamation Service has incorporated the following terms and conditions.

**Limitation of Heating Service.**

If at any time during May or September, the Engineer finds that there is not sufficient surplus energy available for heating after supplying demands for other purposes, he shall so notify the contractor and may require him to cause any or all heating devices to be disconnected for those months.

**Interruption of Service.**

In case of the suspension of service exceeding 24 hours in length in any calendar month, the "hours use" on which the charge for that month is based will be reduced 1/30 for each 24 hours of continuous suspension.

**Failure to Make Payments.**

Payment for energy used in any calendar month shall be due on the 15th of the succeeding month. Upon failure of the contractor to pay for the energy used in any calendar month within 30 days after the close of that month, the United States shall have the right to discontinue the supply of energy and refuse to resume the delivery so long as any part thereof remains unpaid. Such a discontinuance of supply will not relieve the contractor of liability for his agreed maximum demand as stated in Article 2 during the time the supply of energy is so discontinued. Any amounts remaining unpaid more than 30 days after becoming due shall bear interest until paid at the rate of 10% per annum from the date when due.

**Bond.**

The contractor shall furnish bond in the sum of \_\_\_\_\_, such bond conditioned upon the faithful performance by the contractor of all covenants and stipulations in the contract. If during the continuance of the contract any of the sureties die or in the opinion of the engineer are or become irresponsible the engineer may require additional sufficient sureties which the contractor shall furnish to the satisfaction of that officer within 10 days after notice, and in default thereof the contract may be suspended by the engineer.

The contractor hereby agrees that the United States shall have a first mortgage lien on any and all power lines, transformers and electrical equipment of any kind heretofore or hereafter built, owned or installed by the contractor in \_\_\_\_\_ County, Idaho, to secure the payment of and the performance of all conditions herein agreed to be paid or performed by the contractor and upon default in the payment of any of said charges or the performance of any of said conditions said lien may be foreclosed in the manner provided by law for the foreclosure of a mortgage or the United States may at its option, take possession of said power lines, transformers and equipment and operate or sell the same or operate for a time and then sell the same at public auction or private sale and retain and credit to the United States out of the proceeds of such sale all sums due to the United States from the contractor and render to the contractor the balance if any, remaining from the proceeds of such sale after paying the sums and amounts due the United States, and the contractor hereby grants, bargains, sells and conveys to the United States the lien and mortgage above described.

**COMMISSION DECISIONS****PENNSYLVANIA****781—Adequacy.**

W. R. GRUBB, et al. vs. BANGOR LIGHT, HEAT AND POWER COMPANY, et al.  
Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, In Regard  
to Discontinuing Heating Service, October 8, 1914.

The Bangor Electric Light, Heat and Power Company was incorporated with power to furnish electric light and also heat to the Borough of Bangor, and with the consent of the Borough, the Company engaged in supplying heat, using chiefly, if not entirely, the exhaust steam from its lighting plant. It secured the business of the complainants, and placed branch pipes running through their properties. The cost of the several pipes was paid for in certain proportions by the corporation and the complainants. Many of the houses, because of the statements of agents of the corporation, and the dependence upon this source of supply, were erected without other facilities for furnishing heat.

The plant and franchises were sold to the Eastern Pennsylvania Power Company, and subsequently the latter company was merged with the Pennsylvania Utilities Company. After merger, changes were made in operation which interfered with the supply of exhaust steam, and after notice, the steam heating service was discontinued. The mains remain in the streets, and the branch pipes remain on properties of the complainants. Against this continuance of service the complaint in this case was filed.

"It may be reasonably assumed that by these successive conveyances and mergers, the rights, properties and franchises of the Bangor Electric Light, Heat and Power Company, with the corresponding duties and obligations to the public, became vested in the Pennsylvania Utilities Company. The contention of the defendants is, however, that under the acts of Assembly authorizing its incorporation, the Bangor Electric Light, Heat and Power Company and each of the later corporations have no power to supply steam heat. Without determining the question whether any corporation, without special authority, may not engage to sell its waste products, such as exhaust steam, it is sufficient to point out that a corporation ought not to be permitted to set up for its own advantage a lack of power to perform an obligation to a consumer which it has voluntarily assumed, and upon which the consumer has expended moneys and for which he has given up rights of property. Nor will the Commission, in such a case, be astute to look beyond the plain words of the character granting the power to supply heat. Such questions can, with more propriety, be raised in a proper proceeding in a court, where they can be determined with certainty. For the purpose of the present inquiry, the Commission will assume that the officials of the Commonwealth charged with

the duty of supervising the issuing of Charters properly performed those duties. While the Commission, perhaps, ought not to close its eyes to a plain violation of law appearing in a charter, in the present case the power was expressly granted and was exercised by each of the corporations in succession, through altogether a period of twelve years.

"We are of the opinion that it was the duty of the Pennsylvania Utilities Company, after the merger of the Eastern Pennsylvania Power Company, to continue to supply steam heat to the complainants. By its sale of the distributing facilities to the Bangor Steam Heating Company it became practically and physically impossible for either corporation, alone, to supply the steam heat, that is to say, the one corporation had no source or means of supply, and the other no way of distributing steam heat to the consumer. A public duty cannot be escaped in this way. For the purpose of this supply and the obligation to the consumer, the two corporations may still be regarded as a single entity. The duty is mutual and each must perform its part. The Pennsylvania Utilities Company and the Bangor Steam Heating Company ought together to be required to continue the supply of steam heat to the complainants, and an order will be issued accordingly."

## **PENNSYLVANIA**

### **810—Municipal or Local Regulation of Utilities.**

The Petition of the YORK WATER COMPANY for Relief from Ordinance Requiring Installation of Meters. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, Dismissing the Petition, October 9, 1914.

The council of the City of New York, passed an ordinance requiring the Company to install meters, whenever requested in writing by any of its customers. The Company petitioned the Commission to request the Attorney General to proceed by injunction or other appropriate remedy to restrain the City from enforcing this ordinance.

"Many of the propositions urged in the able argument of Counsel for the petitioner may be admitted, to-wit: That it was the intention of the Legislature to place in The Public Service Commission the control of the service and facilities of water companies; that it would be difficult for the water company to obey two different authorities; that the Commission has the power to require the installation of meters; that obedience to the Ordinance would result in discrimination; that the Act of July 26, 1913, repealed the Act of June 27, 1913; and that the Act of June 27, 1913, is unconstitutional. Assuming all of these statements of law to be correct, the inquiry still arises as to where the Commission derives its authority, or where

the duty is imposed upon it, to ask the Attorney General to restrain municipalities from the passage and enforcement of ordinances, even though they be contrary to the law. The Act of July 26, 1913, gives to the Commission the power to supervise contracts between municipal corporations and public service companies, and prevents those corporations from constructing plants for public service without the approval of the Commission, but nowhere is there given power to the Commission to supervise or control municipal legislation or its consequences. There is no such violation of the Public Service Act as the Attorney General could be asked to restrain. The municipal authorities are the representatives of the people in their local affairs. This Commission ought not to assume any control over the officers of municipalities in the performance of duties imposed upon them by municipal authority, unless it appears with sufficient clearance that this is the meaning and intention of the Legislature conferring its powers. If the Commission were to undertake to restrain municipalities in every instance where there is the possibility of infringement upon the authority of the Commission, its jurisdiction would be indefinitely extended. If, as is contended, the Ordinances of the Borough are in conflict with the Law, it is the not unusual case of a wrong committed for the redress of which the Courts are always open. In its inception the effort may be restrained, and if consummated, damages may be awarded."

### **PENNSYLVANIA**

#### **500—Rate Practice.**

JOSEPH CAUFFIEL, ET AL. VS. CITIZENS LIGHT, HEAT AND POWER COMPANY, JOHNSTOWN, Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, October 6, 1914.

Complaint was made to the Commission that the practice of the respondent company in requiring from certain customers a deposit of \$5.00 before installing service was unjust and unreasonable, and also that the minimum monthly charge of the Company of \$1.00 was unjust and unreasonable.

#### **540—Minimum Charge.**

"In regard to the minimum monthly charge of one dollar, the testimony shows that this charge is an increase over a minimum charge formerly made by the company, but that it is not more than is reasonably required to meet the expenses necessarily incurred by the company to place it in a position to be ready to serve the customers, nor is it more than the usual charge for such service.

#### **580—Terms and Conditions.**

The deposit of \$5.00 is required of prospective customers of the Company

who are not property owners or who have not, in some manner, shown to the company their ability to pay for the service which they desire. The commission says:

“This practice is one in very general use in the Commonwealth, and does not appear to the Commission to be either unjust or unreasonable.”

### **COLORADO**

#### **713—Filing of Schedules.**

Regulation Regarding the Filing of the Rates of Public Utilities, Prescribed by the COLORADO PUBLIC UTILITIES COMMISSION. October 12, 1914.

The Public Utilities Commission, recently established in the State of Colorado, has issued an order requiring all the public utilities under its jurisdiction to immediately file schedules showing all rates and charges, together with all rules, regulations, and contracts, which in any manner affect such rates and classifications. Instructions are given which prescribe the form and govern the filing and publications of the rate schedules.

### **CALIFORNIA**

#### **781.5—Inductive Interference.**

RULES GOVERNING THE CONSTRUCTION AND OPERATION OF PARALLEL LINES. Approved by the CALIFORNIA RAILROAD COMMISSION. August 1, 1914.

The commission has prescribed rules to govern the construction and operation of power and communication circuits which are, or are proposed to be, so located as to create a parallel. These rules were made effective, August 20, 1914.

### **WASHINGTON**

#### **450—Value of Service Theory.**

CITY OF SEATTLE v. SEATTLE, RENTON & SOUTHERN RAILWAY COMPANY et al. Decision of the WASHINGTON PUBLIC SERVICE COMMISSION, October 17, 1914.

In discussing the company's proposed increase in fares to a certain district from 5 cents to 10 cents, the Commission says:

"The value of the transportation to the patron to and from his home will not necessarily increase with the increasing population. He will not be charged less for his transportation as the population increases, nor should he be charged more than such transportation is reasonably worth because of the present lack of population. . .

"An increased rate does not always mean an increased revenue to the road; on the contrary, an increased rate sometimes results in confiscation not only of the property of the utility, but of its patrons as well, and we are not convinced that to increase the rates of transportation as requested by the company would not in this case bring about such a result."

## **WASHINGTON**

### **788—Service Rules.**

RULES AS TO ELECTRICAL CONSTRUCTION, AMENDED BY THE WASHINGTON PUBLIC SERVICE COMMISSION. August 14, 1914.

The commission entered an order amending and supplementing the rules contained in chapter 130, session laws of Washington entitled, "An Act Relating to Electrical Construction and Maintenance and Use Of Electrical Wire Apparatus and Appliances, and Providing Penalties For the Violation Thereof."

## **ANNUAL REPORTS**

### **ONTARIO, CANADA**

### **252—Commission Annual Reports.**

EIGHTH ANNUAL REPORT OF THE ONTARIO RAILWAY AND MUNICIPAL BOARD, TO DECEMBER 31, 1913. 588 pages.

The reports of municipalities operating electric light and power plants, gas plants, waterworks plants, and telephone plants are found in the appendix of this report, page 392. In the introduction to this report the board makes the following statement in regard to these reports upon public utilities operated by municipalities:

"The board continues to experience considerable difficulty in obtaining from some municipalities adequate information relating to the operation of these utilities. In some cases municipal officers frankly confess inability to furnish the information required by the Board, advancing the plea that the system of account-keeping prevailing precludes the possibility of supplying much essential data sought by the Board.

"The Board, to meet this difficulty, renew the recommendation already made, that power be granted to it to install in every municipality operating any public utility, a universal system of accounting and record keeping, so that every municipality will have available all the vital data necessary to furnish every year a lucid exhibit of the operation of these public utilities, and all statistics necessary to an intelligent analysis and study of the working of such utilities."

## COURT DECISIONS

### ARKANSAS

#### 120—Protection of the Public.

HUNT et al. v. MARIANNA ELECTRIC COMPANY. Decision of SUPREME COURT OF ARKANSAS. October 19, 1914. 170 Southwestern 96.

The electric company respondent in this action, changed from the production of "133-cycle current of electricity" to a "60-cycle system." The plaintiffs allege that the change has rendered useless all their motors and equipment purchased to be operated under the former system, and that the company is demanding that the subscribers bear the expense of the necessary readjustment. Not all of the facts in the case were in the possession of the higher court, but upon review of the facts shown, the higher court, sustaining the decree of the lower court, dismissed the complaint.

#### 112—Franchises.

"In the matter of granting franchises involving the use of the city streets the city has the right to impose proper conditions to secure a suitable and adequate service to the public. It may not only impose these conditions in the first instance, but it may impose conditions after the grant of the franchise, subject only to the condition that it may not impair the obligation of any contract made with the public service corporation. But, not even by contract, can the city convey away its right of regulation under the police power. Hot Springs Electric Light Co. v. Hot Springs, 70 Ark. 300, 67 S. W. 761."

#### 121—Proper Service.

"Notwithstanding the allegation of the pleadings that the service formerly rendered by the electric company was satisfactory and sufficient, it is not alleged that the change was needlessly and capriciously made, and even though there may have been no municipal requirement in regard to this change, the electric company would have the right to make such change in its system and method of



operation as, in the exercise of an honest judgment on the part of its managing officials, was necessary to a proper service of the public, and there is no allegation that the change was not an advantageous one from the standpoint of the general public, although it is alleged that it was an unnecessary one from the standpoint of these plaintiffs...

"In our judgment, it not having been alleged that the change was needlessly or capriciously made, we think this expense should be borne by the plaintiffs. Otherwise, having become a part of the operating expense of the company, this would be an item to be considered in fixing the rates to be charged all consumers of electricity, and would be an expense to be borne at least by the public generally rather than by those owners who were required to supply themselves with new appliances. . .

"It is no doubt true that these plaintiffs from their standpoint, will be required to incur an expense without fault on their part; but some one at least must bear this expense, and we think that burden must fall upon them. Opportunity for wide choice exists in the selection of appliances for the use of the electric current, and interminable confusion might ensue and great injustice be done if the company was required to take into account these various opinions and preferences resulting from the change in appliances. It was the duty of the plaintiffs in the first instance to furnish their own appliances, and the change of system not having been made needlessly or capriciously, we think it equitable that they should acquire, at their own expense, such fixtures as are adapted to their purposes to receive the current under the new system. Moreover, there are no allegations in the complaint from which it could be said that there was any privity of contract requiring the company to furnish the appellants with any particular kind of current."

## OHIO

### 840—Public Operation.

Opinion of the ATTORNEY GENERAL OF THE STATE OF OHIO, Regarding the Right of Municipalities to Sell Current, July 7, 1914.

The Bureau of Inspection and Supervision of Public Offices, Columbus, Ohio, requested the opinion of the Attorney General as to whether or not the Board of public affairs having control and management of a village electric light plant may legally contract with a partnership composed of resident citizens of the municipality to furnish current which in turn will be sold by the partnership firm to a village situated four miles distant from the municipality owning and operating the electric light plant. The reply of the Attorney General is in part as follows:

"As indicated by the provision of Section 3618 of the General Code the purpose for which a municipality is authorized to establish,

maintain and operate an electric light plant is to supply its own needs and the needs of its inhabitants. Under this power, the municipality may undoubtedly furnish electricity to any person or concern within the city limits, for domestic or commercial lighting. The provisions of this section, however, carry no implication or power in the municipality to furnish electricity to persons or concerns outside of its limits, nor to furnish the same to persons and concerns within the municipality, for purposes other than their own use for light, heat and power. . . .

"Looking to the provisions of the section of the Constitution under consideration, it will be noted that they provide that any municipality, owning and operating a public utility for the purpose of supplying the service or product thereof, to the municipality or its inhabitants, may also sell and deliver *to others* any transportation service of such utility and the surplus product of any other utility, in an amount not exceeding, in either case, fifty per centum of the total service or product supplied by such utility, within the municipality. I have no doubt but that a partnership, located in a municipality owning and operating an electric light plant, and composed of citizens of such municipality, is an inhabitant of such municipality, within the purview of Section 3618 of the General Code, authorizing such municipality to furnish electricity to its inhabitants for light, heat, or power, not that such partnership is an inhabitant, within the meaning of Section 6, Article XVIII of the Constitution. The authority of the provisions of this section of the Constitution only goes to the right of a municipality owning and operating an electric light plant as a public utility, to sell its product to others than its inhabitants to whom, prior to the adoption of the constitutional provisions, the municipality might furnish electric current for purposes of light, heat or power. It results from this consideration that the authority of the constitution provisions is limited to sales of electric current of such municipality, to persons, natural or artificial, outside of and beyond its corporate limits; and that with respect to the question here made (although the village owning and operating the electric light plant, might legally sell surplus current, within the limitations of the constitutional provisions, to the other village in question), the village owning and operating such electric light plant cannot sell the same to any person or concern within the corporate limits for purpose of re-sale.

"In conclusion I may add, that I am inclined to the view that a municipality owning and operating an electric light plant is not authorized to sell electric current to persons and concerns outside of the corporate limits for any purpose other than the use of the same by such persons or concerns for light, heat or power. With respect to the question here presented, however, it is enough to know that such municipality is not authorized to sell current to persons and concerns within its limits for any purpose other than the use of such current for the purpose indicated by Section 3618 General Code."

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## REFERENCES

### INVESTMENT AND RETURN

#### 310—Valuation.

INVESTIGATION OF THE VALUATION AND RATES OF LAKE FOREST WATER COMPANY Before the ILLINOIS PUBLIC SERVICE COMMISSION. Brief on Behalf of the Company. Pamphlet, 113 pages.

A brief submitting testimony regarding the valuation and rates of the Lake Forest Water Company has been submitted to the Commission by Cooke, Pope & Pope, Attorneys for Company, and Olin, Butler, Stebbins, Curkeet & Stroud, Counsel for the Company.

#### 360—Depreciation.

DEPRECIATION AS AN ELEMENT FOR CONSIDERATION IN THE APPRAISAL OF PUBLIC SERVICE PROPERTIES. By C. E. GRUNSKY. *Proceedings of the A. S. C. E.*, Vol. XL, No. 9, November, 1914. p. 2787.

The writer endeavors to show that appraisal for rate-making purposes may always be made at the full amount of the investment, and that when applicable, the method of computing and allowing replacement requirements under the assumption that the property, as a whole, has an unlimited life, instead of allowing depreciation as ordinarily defined, is the one which should find general acceptance. The writer points out that depreciation is not amortization. It has nothing to do with the payment of invested capital, and should always be considered apart from amortization. No part of the capital properly invested in a public service property should be returned to the owner until a transfer of ownership to the public is contemplated. Various methods of valuation and principles concerning depreciation are discussed and compared, and the advantages of the method which the writer calls "the unlimited life method," or a valuation at 100% of the investment, are shown.

### PUBLIC SERVICE REGULATION

#### 200—Public Service Regulation—Law and Practice.

SOME RESULTS OF THE PUBLIC SERVICE COMIANY LAW, by C. LA RUE MUNSON. Address Delivered at the Annual Meeting of the Pennsylvania Water Works Association, at Atlantic City, N. J., October 23, 1914.

The paper discusses the general benefits to be derived from regulation by State Commissions. The members of such commissions and their assistants become skilled and acquire broad experience in the subject. Such regulation results on the one hand in the public being fairly served, while on the other hand unjust competition is not permitted, and the company will be able to receive fair compensation for fair service with the proper returns upon its investments.

**200—Public Service Regulation, Law and Practice.**

THE FAILURE OF REGULATION, by DANIEL W. HOAN. Pamphlet Published by the Socialist Party of the United States, 1914, 98 pages.

The pamphlet is an argument in favor of public ownership, and maintains that regulation has been tried and proved a failure in foreign countries years before it was introduced in the United States; and alleges that regulation in Wisconsin and elsewhere has proved a failure and should be abandoned in favor of public ownership and operation.

**MUNICIPALITIES****830—Public Ownership.**

HOW IT WORKS. Editorial, *Collier's*, November 14, 1914, p. 17.

"Perhaps the most obvious thing for the average city to own is the electric light and power station, since the city already owns, paves and cleans the streets. Between 1902 and 1912 the number of such plants owned by our municipalities increased from 815 to 1,562, while the number commercially owned increased from 2,805 to 3,659. How did they work? The Bureau of the Census has issued a bulletin which gives the answer. The figures show that in 1912 the city owned stations hired 10 per cent of the total number of employes in order to turn out 4.7 per cent of the total product. Electricity is sold by the kilowatt-hour, and the cities increased their average charge from 3.5 cents in 1902 to 4.3 cents in 1912, while the commercial plants reduced their average charge from 3.4 cents to 2.5 cents. It is clear that this reflects, among other things, the growth of municipal ownership in the smaller towns, where it really does cost more to turn out "the juice;" but the trouble is that the whole drift of the statistical evidence is in the same direction. The city-owned plants tend to fall back on higher rates and the kindly nurture of taxes, and do not deliver the goods. There is another seamy side to the story, viz., the way in which these municipal enterprises resist State regulation, and especially the introduction of uniform accounting methods which would show all the facts. Municipal ownership spells opportunity for the politician and his officeholders, but it does not spell service."

**830—Public Ownership.**

MUNICIPAL OWNERSHIP AND OPERATION OF WATERWORKS, by M. N. BAKER. An Address Before the Conference of American Mayors on Public Policies as to Municipal Utilities, Philadelphia, Penn., Nov. 14, 1914. *Engineering News*, December 3, 1914, p. 1115.

The increase in the percentage of municipal ownership of waterworks in the last fifteen years is noted with approval. The writer, however, says that, notwithstanding all that has been said in favor of home rule, municipal, as well as private waterworks should be subject to State regulation. Even if in no other respect, there must be State regulation of the purity of the supply. Another necessity of State regulation is pointed out when the writer calls attention to the rank injustice now prevailing, in that the distribution in the cost of the service between the private consumer and the city at large, is made upon an inequitable basis; and the writer says that the Wisconsin Commission has taken a long step in the right direction in compelling cities to raise by taxation an adequate sum to pay for fire protection and other public services, instead of settling this charge upon private consumers.

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**830—Public Ownership.**

NO MUNICIPAL PLANT FOR DAYTON. *Public Service*, December 1914, p. 171.

An account is given of the rejection by the voters of Dayton, Ohio, of the proposal for the city to build a municipal electric light plant.

**840—Public Operation.**

WHAT THE PUBLIC LEADERS FOUND IN EUROPE. *Public Service*. December 1914. p. 167.

Abstract is given of the report of William D. Mahon and L. D. Bland, officials of the Association of the Street Car Employees of America regarding the municipal tramways and working conditions in various European countries. The report shows that the municipally owned lines of European cities cost the passengers more, give less adequate service, and pay less wages to employees, than do the privately owned lines of American cities.

**840—Public Operation.**

REPORT OF THE WALLINGFORD ELECTRIC WORKS, Wallingford, Connecticut, for the year ending July 31, 1914. Pamphlet, 40 pages.

The Board of Electric Commissioners of the Borough of Wallingford presented an annual report showing the receipts and expenses and the assets and liabilities of the Borough's Electric Plant. We note from the report that 8% is allowed for depreciation. The Borough offers for residence-lighting, a base rate of 10 cents per kilowatt-hour, with a minimum ready-to-serve charge of \$1.00 per month.

**840—Public Operation.**

REPORT ON WATER POWER DEVELOPMENT OF SANITARY DISTRICT OF CHICAGO. *Electrical Review and Western Electrician*. December 5, 1914. p. 1096.

A summary is given of the report on the hydro electric development of the Sanitary District of Chicago which was referred to in 6 RATE RESEARCH 114.

## **GENERAL**

**788—Service Rules.**

NATIONAL ELECTRICAL CODE WIRING RULES COMPARED WITH THE GERMAN AND ENGLISH RULES. 9 Pages. *Electrical Review and Western Electrician*. December 5, 1914. Page 1081; Editorial, Page 1065.

A comparison is made of the wiring rules prescribed in the National Electrical Code prepared by the Committee on Wiring of Existing Buildings of the N. E. L. A.,

with the German and English wiring rules. Two curve sheets comparing requirements of the three sets of rules are published and the comparison has been worked out in three parallel columns, making a comparison of the rules on any point very accessible.

### **910—Promotion and Growth of Business.**

**RURAL ELECTRICAL DEVELOPMENT IN INDIANA**, by A. R. HOLLIDAY. Paper Read at the Indiana Electric Light Association, September 23, 1914.

The possibilities of the development of electric consumption among the rural population of Indiana has been seriously considered only during the last two years. It appears at the present time that there is a large demand for this service, and that a rural customer can be developed into a larger consumer than the city customer as usually he needs power for pumping, feed grinding and other farm purposes. The cost of furnishing such service and the terms and conditions which have been proposed in certain localities are discussed. The writer, however, points out that this service cannot be developed as needed without the employment of additional capital, and in conclusion states that at the present time the attitude of the public is distinctly hostile to capital. The rulings of the Indiana Public Service Commission have not been such that foreign capital is attracted to utilities in this State. Until the time comes when the outlook will be more reassuring the rural electrical development of Indiana must be held in abeyance. The commission should, and the companies interested must educate the public to recognize that no development beneficial to the public can be brought about without the investment of capital; that ample and sure returns must be guaranteed this capital to attract it; and that ample returns mean such interest returns that there will always be ready money available for development.

## **COURT DECISION REFERENCES.**

### **122—Just and Unjust Charges.**

**BOROUGH OF MECHANICSBURG V. MECHANICSBURG GAS & WATER CO.**  
Decision of the PENNSYLVANIA SUPREME COURT, July 1, 1914.

The borough alleges that an increased rate for water furnished the borough for fire service is unreasonable, and in excess of contract between the parties. The court says:

"It is to be assumed that in framing its general schedule of rates, the water company has been guided by some rule or principle which would enable it to be just to itself, and at the same time enable it, with reasonable approximation, to make its charges for its varying services conform to some standard which would secure to the consumers reasonable uniformity in cost. *Leechburg Borough v. Waterworks Co.*, 219 Pa. 263, 266, 68 Atl. 669. The presumption is that the rates fixed by the schedule are reasonable, both as to compensation for the services performed by the water company and as to the charges to be paid by the consumer, and the burden of showing the contrary is on the party who alleges it."

The court alleges that evidence offered by the plaintiff showing the rates for service in other boroughs should be disregarded, in view of the fact that no evidence was submitted to show similarity of conditions in those boroughs to the conditions in the plaintiff borough.

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
RATES		179
Indianapolis, Indiana		179
COURT DECISIONS		180
New Jersey		180
Idaho		186
COMMISSION DECISIONS		188
New York		188
REFERENCES		190
Municipalities		190
General		191
Court Decision References		191



# Rate Research

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Vol. 6

CHICAGO, DECEMBER 17, 1914

No. 12

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### INDIANAPOLIS, INDIANA.

#### 720—Rate Schedules.

The MERCHANTS' HEAT AND LIGHT COMPANY of Indianapolis, Indiana, have filed a supplement to their rate schedules, which is issued on less than statutory notice by authority of the INDIANAPOLIS PUBLIC SERVICE COMMISSION. The residence lighting rate for Indianapolis, effective January 1, 1915, is as follows:

#### RESIDENCE LIGHTING RATE.

##### Rate.

7½ cents per kilowatt-hour for the first three kilowatt-hours per active room per month.

5 cents per kilowatt-hour for all excess energy used per month.

##### Active Rooms.

All rooms, except the following shall be deemed active: bath-rooms, halls, porches, closets, garrets, and basements.

##### Prompt Payment Discount.

A discount is allowed for prompt payment, aggregating ½ cent per kilowatt-hour for all energy used if paid within ten days of date of billing.

##### Minimum Charge.

50 cents per month per meter.

##### Term of Contract.

The above rates are applicable to customers contracting for service for five years for residence lighting.

A supplement effective November 26, 1914, reduced the minimum charge for residence lighting from \$1.00 as heretofore, to 50 cents, and provided the following schedules for wholesale and off-peak service:

#### WHOLESALE ELECTRIC ENERGY SCHEDULE.

##### Rate.

##### Demand Charge.

\$1.25 per kilowatt-hour per month, plus an

##### Energy Charge of

1 cent per kilowatt-hour metered on the primary side of the transformer.

**Minimum Charge.**

The customer guarantees four hours average daily use of the demand with a yearly minimum charge of \$3,000.

**Term of Contract.**

Five years is the term of contract under this schedule.

**Terms and Conditions.**

**Off Peak Service:** With an agreement to use no Power between the hours of 4:30 P. M. and 6:30 P. M. during the months of November, December, January and February, the yearly minimum charge shall be \$1,000.00 and demand load for each year shall be computed by taking the average of the maximum load of not less than 3 minutes duration each month for 5 maximum demand months.

**ADDITIONAL OFF PEAK SCHEDULE FOR LIGHT AND POWER.****Rate.**

2 cents per kilowatt-hour with six to eight hours daily use of the demand.

**Minimum Charge.**

\$25.00 per month per meter.

**Terms and Conditions.**

Measurements shall be made on secondary side of the transformer.

## **COURT DECISIONS**

### **NEW JERSEY.**

#### **300—Investment and Return.**

PUBLIC SERVICE GAS COMPANY VS. BOARD OF PUBLIC UTILITY COMMISSIONERS, ET AL. Decision of the NEW JERSEY COURT OF ERRORS AND APPEALS, December 9, 1914.

An appeal was made from a decision of the Supreme Court, affirming the order of the New Jersey Board of Public Utility Commissioners which fixed the rate for gas in the territory called the Passaic division at 90 cents per thousand feet. The decision of the court follows closely the findings of the lower court except in the matter of the valuation of intangible property, with particular attention to the matter of franchise value. The Court of Errors and Appeals approved the 8 per cent rate of return allowed by the Commission and lower court; and did not alter the findings as to value of the physical property.

#### **315—Intangibles.**

“This brings us to the other main element of value, called by the Commission the total value of all the intangible property of the company, and which the Board estimated at thirty per cent of the valuation assigned by them to the structural plant. This, as the Board expressly stated, included everything outside of the tangible

property and associated plant assets, such as working capital. They expressly included preliminary outlay, such as engineering and legal expenses, canvassing, costs of incorporation, cost of securing franchises, financing, bankers' commission, deficit in operation during the earlier years, and inadequate early returns upon the investment; also 'the entire value of all franchises, primary or secondary, possessed or exercised by the company in the Passaic Division.' Two or three other specific intangible elements were included that need no notice here. Nothing was allowed for good will."

#### 315.4- Franchise Value.

"In discussing the matter of franchises, the Commission remarked that its finding as to the total amount of intangible property was 'tantamount to including the franchises of the company at a moderate rating at a value comparable to the cost of obtaining these or similar franchises. It amounts, therefore,' say the Commissioners, 'to a practical denial of the company's contentions as to the value of its franchises.' The Board stated that it is the public policy of the State not to allow the capitalization of franchises for an amount in excess of the actual cost involved in obtaining said franchises; evidently referring to paragraph F of section 18 of the Utilities Act, P. L. 1911, p. 381. We find difficulty in ascertaining from the report the method adopted by the Commissioners for valuation of the franchises. In one place they announce that such value is included in the thirty per cent estimate of all the intangible property; in other places they say that there is no evidence before them to show that these franchises should be valued at any more than the cost of obtaining them; in their general summary of valuations the franchises are listed as an item and no value assigned thereto, and the next item consists of patent rights, which the Commission expressly declare to have no value whatever; and yet the Commission conceded that special franchises are property; that when tangible property is operated under franchise rights, the instrument of public service is worth more than the material and labor involved in its construction; that taxation is imposed in respect of special charters as 'property' in this and other states; and that neither franchise nor any other property can be taken for public use without just compensation. These are extracts from the report in its exact language. In dealing with this question the supreme court seems to have gone a step further, for it held that 'logically, no allowance should be made for the value of the special franchise in a case where it is not legally exclusive and where the state still retains the right to fix rates.' 84. N. J. L., 482.

"We find ourselves unable to concur in this result. Without adopting in its entirety the rule laid down in our railroad tax cases, that the total valuation of the property and franchises should be gauged by the market value of the outstanding corporate securities plus floating debt, and that therefore the value of the franchises would

be indicated by the difference between this total and the sum of the value of the physical plant plus development cost; and conceding that in most of the cases of public utilities the privilege of utilizing the public domain is not exclusive, and is therefore subject to invasion by other similar utilities, and conceding also that charters and local franchises are often granted by the State or the municipality without a cash or property consideration, the conviction still remains that such franchises have substantial value. We often hear of old charters being bought up for use by new enterprises. The very charter of the appellant seems to be one of this class. It seems a fallacy to say that if and because a municipality confers upon a gas company or a street railway company the privilege of using the public streets without any consideration in cash or property passing from the company, the rights thereby conferred should have no value for rate making purposes; for this disregards at least the meritorious consideration that the promoters of the company have invested their money and given their time and taken their business risks in view of the making of this very concession, and the value of the enterprise on which the owners are entitled to draw an income should not be limited to the mere cash that they have put into it, but should include something for the risk and responsibility that they have taken in organizing and developing it.

### **330—Capitalization.**

"It is true, as the Board remarked, that the Utilities Act forbids the capitalization of franchises. This prohibition, however, refers to the inclusion of a franchise valuation in the par value of capital stock, but does not affect its market value. Just as the value of a bank stock may be and often is legitimately enhanced by public confidence in the directors of a bank and the methods of its business management; *Newark v. Tunis*, 81 L., 45; 82 L., 461; so the market value of the securities of a public utility may be enhanced in part, at least, by the fact that it is operating under a municipal franchise costing little or nothing in cash outlay, subject, it may be, to duplication, but which the public has the right to suppose in a proper case will follow the general run of such franchises and be free from indiscriminate competition although not legally exclusive. Such a situation would be a legitimate element of market value and would be taxable, as reasonably and fairly enhancing the value of the property in the public mind. It would thus be capitalized, not by the utility itself but by the public as a business matter, and against such capitalization there is no prohibition, legislative or otherwise.

"It seems a work of supererogation to cite authorities for the proposition that franchises are 'property' and that the courts will protect them, not to speak of their being subject to taxation. As we have seen, the Board itself conceded that they were property and the Supreme Court did likewise. Still, a glance over some decisions will do no harm.

## 112—Franchises.

"In 1878 Vice-Chancellor Van Fleet, in the case of Jersey City Gas Co. v. Dwight, 29 Eq., 242, dealing with a special gas company charter granted in 1849, held that while the business of making and selling gas is not a prerogative of government, the right to use the public streets to lay gas pipes therein is a franchise which the State alone can confer. He held, further, 'that a franchise is property, which, like every other thing susceptible of private ownership, is under the protection of the law;' and that a 'grant of a franchise by the State is by its own intrinsic force, and without express words, exclusive against all persons but the State, and that any attempt to exercise like rights and privileges without legislative authority, is a fraud and an unwarrantable usurpation of power.' Accordingly, on the complaint of a duly incorporated gas company invested by its charter (P. L. 1849, p. 279) with the right to lay pipes in the streets of Jersey City, he enjoined such laying of pipes by defendants claiming incorporation under the general gas company act of 1876 (C. S. 3142) whose attempted incorporation he adjudged invalid. The complainant in that case acquired its franchise to lay and maintain pipes in Jersey City directly from the State; so, apparently, did the Public Service Gas Company, which as we are given to understand is the same corporation chartered as the 'Oxy-Hydrogen Company of the United States.' P. L. 1873, p. 1442. By the gas company act of 1876, *ubi supra*, companies organized thereunder were vested with the right to lay pipes, etc., upon obtaining the written consent of the municipal authorities and under such regulations as they may prescribe. This Section (17) was amended to include boroughs in 1902. P. L., pp. 229, 231. That the power to grant the franchise was delegated in part, does not affect the main proposition that it is a franchise, and is property.

"The decision in Jersey City v. Dwight was overruled so far as related to the power of the court of chancery to inquire into the legality of the organization of a *de facto* corporation. National Docks R. R. Co. v. Central R. R. Co., 32 Eq., 755. The Vice-Chancellor recognized this later in Elizabethtown Gas Light Co. v. Green, 46 N. J., Eq., 329. But the status of a gas franchise as property, and the right of a court of equity to enjoin its unlawful invasion were reaffirmed in an opinion by Vice-Chancellor Leaning in Millville Gas Light Co. v. Vineland Light & Power Co., 72 Eq., 305, a preliminary injunction being denied on the sole ground that the case was not sufficiently clear. In Township of Landis v. Millville Gas Light Co. 72 Eq. 347, he awarded a preliminary injunction against unwarranted use of the highways, and on appeal this court referred with approval to his opinions in both cases. 73 Eq., 739, 740. A similar ruling was made by Vice-Chancellor Emery in the case of unlawful usurpation of highways by a water company. Franklin Township v. Nutley Water Co., 53 Eq., 601. The law courts have similarly dealt with this privilege as a legal franchise, depending on compliance with conditions precedent. In People's

Gas Light Co. v. Jersey City, 46 L., 297, the Supreme Court on the complaint of two gas companies set aside on certiorari a grant of street privileges to a third gas company for irregular procedure, saying that 'beside the common interest which every citizen has in preserving the streets for public travel, these two corporations have special business privileges which they are entitled to protect against any unlawful rivalry.'

### 380—Taxation.

"The status of such local franchises as property is emphasized when we consider the provisions made by the legislature for taxing them, and the deliverances of our courts in tax cases. The broad doctrine that corporate franchises generally are property, and are taxable as such, laid down in the leading case of State Board of Assessors v. Central R. R. Co., 48 L., 146, has stood unimpaired to this day, and the machinery and procedure for ascertaining the value of a railroad franchise for purposes of taxation are familiar to all who have read that case and the line of decisions based thereon. In that case the franchise was a State franchise, as perhaps also in the case at bar. In the cases, however, of street railways, gas and electric light companies, water companies and the like, the franchises partake of a local as well as of a State character, but are similarly property, and taxable if the legislature chose to tax them. Thus, in Passaic Water Co. v. Paterson, 56 L., 471, it was held by the Supreme Court that the 'corporate franchise' of the water company was property, and taxable, the inquiry then being whether the language of the supplement of 1866 to the general tax act of 1846 contemplated its taxation locally, and it was held that it did not. That decision was followed by this court in North Jersey Street Railway Co. v. Jersey City, 74 L., 761.

"In 1900 the taxing authorities of Newark undertook to tax the franchise of a street railway company under the act of 1866 by calling it an easement, and their action was sustained by the Supreme Court. Newark v. State Board of Taxation, 66 L., 466. This court, however, reversed that decision, and held that the right to occupy the streets was to be classed as a franchise and taxable as such, i. e., by the State Board of Assessors and not locally, S. C. 67 L., 246. The Brief opinion of the present Chief Justice, speaking for this court, illumines the point now under consideration, i. e., whether franchise has substantial value. He said:

" 'That there is an inherent value in the property of the North Jersey Street Railway Company, over and above the cost of reproducing its rails, stringers, poles, wires, power house, etc., needs no demonstration. That value, however, springs not out of any ownership by the company of an interest in the soil of the highways over which its road passes, but out of its ownership of the franchise to maintain and operate its road over those highways, and to collect tolls from

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all persons traveling upon it. This franchise is property, and taxable as such. *State Board of Assessors v. Central Railroad Co.*, 19 Vroom, 146; but, under present legislation, the right to tax it has been reserved by the State to itself, through the State Board of Assessors, and not delegated to the several municipalities through which the company's road passes.'

'These decisions were based on the tax act of 1846 and the supplement of 1866.

'In 1900 the legislature passed an act to tax the property and franchises of all corporations using public streets, etc., except those taxable as railroads. This statute is commonly known as the 'Voorhees Act.' P. L. 1900, p. 502; C. S., 5298.

'It provides a general scheme for the local taxation of tangible property, and a fixed franchise tax of two per cent of the gross receipts to be divided pro rata among the municipalities in which the corporations operate.

'The constitutionality of the act was challenged and sustained by the Supreme Court. *North Jersey Street Railway Co. v. Jersey City*, 73 L., 481. The judgment was affirmed in this court. 74 L., 761.

'It is significant that by Section 8 of the Act of 1900 as originally enacted, it was not to apply to any corporation not exercising any municipal franchise. This clause led to litigation by corporations seeking to escape taxation under the act, resulting in the decision of the Supreme Court in *State Board v. Plainfield Water Co.*, 67 N. J. L., 357, where that court defined a 'municipal franchise' as one granted by the legislature upon condition that it shall not be exercised by the grantee without first obtaining the consent of the municipality within those limits the franchise is to be exercised. The franchise of the Water Company was held not to be within the definition. But in *Paterson & Passaic Gas Co. v. State Board*, 69 N. J. L., 116, affirmed 70 L. 825, the occupancy of streets by the company pursuant to municipal permission was held to be a municipal franchise and taxable as such. True, the tax on franchise provided by the act of 1900 is held to be a franchise or license tax and not a property tax; *North Jersey Street Railway Co. v. Jersey City*, 73 L. 481, 74 L. 761; but this is of no moment in the present inquiry; for nowhere in the line of decisions is it intimated that the franchise itself is not property, while on the contrary this court has flatly held, e. g., in *Newark v. State Board*, 67 L. 246, *supra*, that it is. And in the *North Jersey* case just cited the Supreme Court cites *Metropolitan Street Railway Co. v. New York*, 199 U. S. 1, where it was held that under the New York act of 1899 the franchise could be subjected to both a license tax and a property tax.

'It should be unnecessary to remark that our reports would not contain this long line of decisions in earnestly litigated franchise tax

cases, were it not a fact that franchises, general or local, State or municipal, have a substantial value of which the taxing authorities are prompt to take advantage, and which value, in tax assessment controversies, the authorities estimate often in large figures. If other evidence of substantial value were needed, it may be found in the fact that as to municipal franchises, the municipality may impose within reason, and the utility must comply with, conditions involving considerable expense, *J. C. & H. R. R. Co. v. J. C. & B. R. R. Co.*, 21 Eq. 550. A familiar example is the requirement that a street railway company shall pave between its tracks, or keep the street in repair. *Trenton v. Trenton Street Railway Co.*, 72 L. 317; *Freeholders of Hudson v. Jersey City, etc., Railway Co.*, 85 L. 179. Indeed, the Voorhees act of 1900 expressly recognized the lawfulness of a cash rental as a consideration for a franchise to occupy the streets, and applies it on account of franchise tax. If it exceed the franchise tax, the excess must still be paid. Sec. 7. See *Eatontown v. Monmouth County Electric Co.*, 78 L. 493."

(Continued in the next issue of RATE RESEARCH.)

## IDAHO

### 241—Investigations.

FEDERAL MINING & SMELTING CO. v. PUBLIC UTILITIES COMMISSION ET AL. Decision of the IDAHO SUPREME COURT, Regarding the Right or Duty of Commission in Requiring Company to Produce Books and Records for Inspection. October 17, 1914.

The plaintiff filed a formal complaint with the Public Utilities Commission, alleging that the rates for power furnished by the Washington Water Power Company were unreasonable. During the preliminary investigation the complainant asked the Commission to require the water power company to produce for inspection all books and records, or certified copies thereof, within the State of Idaho, for examination by the attorneys or expert accountants of the plaintiff, in order that the complainant might secure information in preparing for the hearing before the Commission. The Commission denied the request and the denial is brought before the court with the petition that the Commission be required to grant the motion for an inspection of the books and records.

"The question is then directly presented: What was the purpose intended to be served by the provisions to the said sections of said act [Sections 26 (d), 29, 54 and 55], with reference to the inspection of the books and records of public utilities? It was no doubt for the purpose of enabling the Commission to ascertain fully at any time the manner in which any public utility is conducting its business and whether it is violating the law or acting unjustly toward the public in the matter of rates. Those sections were not intended to



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enable those who complain against public utilities to go on 'fishing expeditions' through all the correspondence, papers and records of a utility corporation to see if they can obtain some evidence against the legality of the acts of such corporation, or to procure information that might be valuable to one contemplating the purchase or duplication of such plant, or for the purpose of procuring information that one was not entitled to without the consent of the corporation." . . .

The decision reviews a number of the holdings of the courts in similar cases, as to the justice and right of demanding the production of the books and records for the inspection of the Commission or complaining parties, and in conclusion the court reviews its findings as follows:

"The Commission has full power and authority to compel the production of all material evidence on the trial of said case, and on proper application, no doubt will do so; but, in the first instance, it is for the Commission to determine whether the documents or evidence demanded is material and necessary, and if the Commission concludes that it is not, it is its duty to decline to receive immaterial evidence and to decline to grant any application of the parties for an inspection of the records and files of a public corporation which it considers is not material to any of the issues involved.

"The plaintiff is not entitled to an examination of the records and files of a corporation which can possibly have no bearing on the issues of the case, and to compel the corporation to produce the same would be most unreasonable; and the Constitution of the United States, as well as the Constitution of the State of Idaho, prohibits unreasonable searches and seizures. Section 17, Art. 1, State Constitution; *Hale v. Henkel*, 201 U. S., 43, 26 Sup. Ct., 370, 50 L. Ed., 652; *Wilson v. United States*, 221 U. S., 361, 31 Sup. Ct., 538, 55 L. Ed., 771, Ann. Cas. 1912D., 558. In general, parties litigant who desire to inspect the books and records of opposing parties must make some showing as to the necessity of such inspection and their demands must specify with reasonable exactness the particular books and papers which they desire to examine. If it is made to appear that an examination of any of the books, records and files of the corporation is necessary to a proper determination of the issues involved, the Commission certainly will require their production on its own motion, or on the application of the plaintiff, before or during the hearing, and give ample opportunity for an inspection thereof. But the Commission has no authority under said act to permit a party litigant to examine the records and files of a utility corporation that do not pertain to the issues made by the pleadings, and the Commission has no authority under said act to permit a party to examine the records and files of the Washington Water Power Company, in a case pending before it, which are not pertinent or material to the issues made by the pleadings.

"We therefore conclude that the action of the Commission in refusing to grant said motion must be affirmed."

**COMMISSION DECISIONS****NEW YORK****132—Protection from Competition.**

Petition of the TRUSTEES OF THE VILLAGE OF BATH, For a Certificate of Authority to Construct and Operate an Electric Plant for Supplying Light to the Public and for Municipal Purposes. Decision of the NEW YORK PUBLIC SERVICE COMMISSION (2 D.), Granting the Certificate. October 14, 1914.

"The questions here to be considered arise in connection with an application made on behalf of the trustees of the Village of Bath for leave to construct and maintain a system for furnishing electricity for light, heat and power to the inhabitants of Bath. The application is opposed by the Bath Electric and Gas Light Company, which for a number of years has been operating in Bath and supplying electricity to the Village and to its inhabitants. Quite recently the Village refused to renew its street lighting contract with this company, and has already practically completed the erection of a plant of its own. It has a perfect right to do this without seeking any preliminary approval of the project from the Public Service Commission, if it makes no other use of the new plant than to light the Village and public buildings, or perform such other electrical services as the municipality requires. But before a municipal plant may engage in the business of supplying light, heat or power to commercial or private consumers, the consent of the Public Service Commission must first be had. This provision was obviously inserted in the Public Service Commission Law for the protection of investments already made in good faith by private capitalists. This Commission must, of course, carefully scrutinize cases like the present one in the light of that intention on the part of the framers of the laws.

"We commence the consideration of the present case, however, with the certainty staring us in the face that, whether we grant the present application or not, a municipal plant is to be established in Bath. Adverse action by this Commission merely means that the business of the new plant will have to be limited in the manner I have mentioned; the matter has already gone too far to make it possible, in any event, that the plant will not be established. All the formalities required by law, such as the holding of a special election and favorable action by the Board of Trustees of the Village of Bath, have long since been complied with. The work of constructing the plant has in fact, as I have said, been largely completed. Local public sentiment in Bath seems to have definitely crystallized in favor of this course of action, beyond any reasonable expectation of a subsequent change in the attitude of the people of the locality."

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**132.2—Fair Rates and Efficient Service.**

“It is not altogether surprising that this condition of affairs should have developed. The existing company has apparently never been able to give the people of Bath a service which was in the least degree satisfactory to them. It certainly is not doing so now. Its career in Bath has been one of almost uninterrupted controversy with its customers over the quality of the service it supplied and over its cost. This condition of affairs has more than once been brought to the attention of the Public Service Commission. In 1907 this Commission granted leave to a company called the Citizens Electric Service Company of Bath to construct a plant and to exercise certain franchises which had previously been given by the Village. For some reason that company never availed itself of the opportunity thus acquired; but what Mr. Stevens, who was then Chairman of the Commission, stated in an opinion which he wrote in connection with the Citizens Company’s application, is on that account none the less germane to the present controversy. In his opinion the Chairman laid stress upon the utterly unsatisfactory service which the company was then supplying, and based his decision to permit the competing concern to enter the field upon this bad service. That was seven years ago, and although there have been changes in management since then, there has apparently been no change whatever in the quality of the service which the Bath Electric and Gas Light Company is in a position to supply its patrons. It is still operated by non-resident owners, whose headquarters are in Philadelphia, Pa., and who but rarely visit Bath in person. Its plant is still inadequate and antiquated. Its relations with the inhabitants of Bath are now so strained that there does not seem to be the slightest chance that the Village will ever again be willing to enter into a street lighting contract with the company. Whatever slight hopes of this may have been entertained must have ended with the actual construction by the Village of a plant of its own.

“Bath does not afford a large enough field for more than one electric plant to be operated at a profit. To succeed financially, such a plant must not only develop the business of private consumers to the fullest possible extent, but it must have the contract to light the village streets as well. Without this street lighting contract, the existing company cannot hope to achieve any sort of financial prosperity. It may struggle along briefly, but without profit either to itself or to the people of Bath. It will scarcely be able, in our opinion, to give the sort of electric service which under modern conditions the people of a village like Bath have a right to expect.

“Under these circumstances we do not think that the new municipal venture, also, should be condemned in advance to a career of financial failure, as it certainly would be if we were to cut it off from the opportunity of supplementing its municipal business with such business as it may be able to get from private consumers. No matter whether the inhabitants of Bath, in deciding to maintain a

municipal plant of their own, have acted wisely or foolishly, the step has been taken. The business of the municipality is already assured to the new concern, and as matters now stand the only hope that individual consumers of electricity in Bath have of enjoying good electric service in the near future seems to lie in the same direction. The hope may not be realized, but favorable action on the present application will at least make it possible, under good management, for the new plant to justify its existence and prove itself a blessing to the neighborhood, while to deny this application would be to foredoom both plants to financial failure.

"We have no hesitation in expressing a considerable amount of sympathy for the present company, which is perhaps suffering from conditions for which the existing management is not responsible, but which, nevertheless, are now entirely beyond its power to control. We will even go so far as to express the thought that, if the Village of Bath can possibly see its way clear so to do, it would be but fair and generous on its part to buy out the present company, if proper terms can be agreed upon. Naturally, however, we make no condition of this sort in granting the present application. It is not within our power so to do."

## REFERENCES

### MUNICIPALITIES

#### 830—Public Ownership.

WHAT'S WRONG WITH MUNICIPAL OWNERSHIP? By CHARLES A. WARNER. Paper Presented at the Third Annual Conference of the League of Northwest Municipalities, Seattle, November 12, 1914. 3 pages. *Journal of Electricity, Power and Gas*, December 5, 1914, p. 504.

The weak points in municipal ownership are pointed out and certain remedies are suggested. One trouble with municipal operation is that the municipal utilities are not placed upon the same basis as privately operated utilities. In some cases private utility corporations are regulated very severely, at the same time competing with municipal utilities which are run without regulation. The special advantages enjoyed by the municipal utilities have been the direct cause of mismanagement, graft, extravagance and exploitation of the utility for private benefit. It is urged that such utilities be given the same degree of regulation and be required to furnish adequate service and to extend the same courteous treatment to their customers that is required of the modern private company. The writer states that he has been an enthusiastic supporter of municipal ownership, but he believes that for the present the public will be best served, the greatest development of our resources achieved and the "greatest good to the greatest number" realized, by public ownership of public resources and private development of those resources under public regulation, on terms that will protect the public and encourage private enterprise.

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**GENERAL****782.2—Voltage Regulation.**

**VOLTAGE REGULATION.** By A. M. BRANDT. Read before the Pacific Gas & Electric Company Section of the N. E. L. A., October 2, 1914.

A number of charts and curves are given, showing that large and important changes in candle power, wattage, lamp and energy costs, quality of lights, etc., take place with small variations in voltage. The problems to be met in maintaining a uniform voltage are discussed and some of the means employed at the present time in maintaining the necessary regulation are outlined.

**COURT DECISION REFERENCES.****112—Franchise.**

**ASHLAND ELECTRIC POWER & LIGHT CO. v. CITY OF ASHLAND, ET AL.** Decision of the DISTRICT COURT, D. OREGON, October 5, 1914.

The City of Ashland by ordinance granted the electric company the right to use its streets and public grounds for the purpose of establishing and operating a system of electric lighting. Subsequently, the city sought to repeal in toto the ordinance and to require the light company to remove its system from the streets and highways of the city. The light company has instituted a suit to restrain the city from interfering with its rights and privileges, alleging that the city is seeking to deprive the plaintiff of its property without due process of law.

"If the plaintiff has acquired the right and privilege of constructing and maintaining an electric lighting system within the city by irrevocable grant or contract, any attempt on the part of the city to summarily oust the plaintiff would be tantamount to depriving it of its property without due process of law, contrary to Section 1, Art. 14 of the Federal Constitution, and hence a Federal question would be involved. *Boise Water Co. v. Boise City*, 230 U. S. 84, 33 Sup. Ct., 997, 57 L. Ed., 1400.

"The chief controversy is whether it was competent for the city council of the City of Ashland to confer a perpetual right or authority upon the plaintiff to construct and maintain an electric lighting system within the city. It has been definitely settled by authority of the Supreme Court that a 'grant by ordinance to an incorporated telephone company, its successors and assigns, of the right to occupy the streets and alleys of a city with its poles and wires for the necessary conduct of a public telephone business, is a grant of a property right in perpetuity, unless limited in duration by the grant itself or as a consequence of some limitation imposed by the general law of the state or by the corporate powers of the city making the grant. *Owensboro v. Cumberland Telephone Co.*, 230 U. S. 58, 65, 33 Sup. Ct. 988, 990 (57 L. Ed. 1389); *Boise Water Co. v. Boise City*, 230 U. S. 84, 33 Sup. Ct. 997, 57 L. Ed. 1400; *Detroit v. Detroit Citizens' Street Ry. Co.*, 184 U. S. 368, 22 Sup. Ct. 410, 46 L. Ed. 592; *Louisville v. Cumberland Telephone Co.*, 224 U. S. 649, 32 Sup. Ct. 741, 56 L. Ed. 1151."

"The grant is one to exercise the right generally, without any limitation as to the time of its running. There is no limitation set upon such a grant by general law, so far as I have been advised; nor is there to be found in the corporate powers of the city existing at the time of the grant any such restriction. So it would seem, in view of these authorities, that the grant was one in perpetuity."

#### 244—Rehearing and Appeal.

ST. LOUIS, I. M. & S. RY. CO., ET AL. V. UNITED STATES (INTERSTATE COMMERCE COMMISSION, Intervener). Decision of the DISTRICT COURT, E. D. ILLINOIS, September 10, 1914.

Upon an appeal from a decision of the Interstate Commerce Commission the court made the following holdings in regard to the right of the court to review an order of the Commission.

"Beginning with the Abilene Case, and down through the Piteairn, Robinson, Mitchell Coal & Coke, International Coal, and many other cases, the general principle has been thoroughly settled that the courts of the United States cannot act in these interstate commerce cases as they can in ordinary appeals in equity, where the court may examine the evidence and substitute its findings of facts for that of the original tribunal. Questions of policy and expediency cannot be considered. In short, nothing can be reviewed except questions of law. But in interstate commerce cases, as in all other cases, it is always a question of law whether there is evidence on which the finding can legally be based."

#### 781—Adequacy.

CHESAPEAKE & O. RY. CO. V. PUBLIC SERVICE COMMISSION. Decision of WEST VIRGINIA SUPREME COURT OF APPEALS, October 13, 1914.

Upon an inquiry as to the reasonableness of an order entered by the Public Service Commission requiring installation and operation of the passenger service on a branch line, the court defines adequacy of service as follows:

"To be adequate, the service and facilities must be commensurate with the duties to be performed, the extent of the demand for transportation, the cost and returns of the additional service, when properly ascertained, and consonant with the various other circumstances and conditions under which performance is required. . . .

"But the main ground of complaint urged by the company relates to the expense incident to compliance with the order, and the probable inadequacy of returns from the service required. Conceding the probable results to be as the railroad contends, can the company, for that reason alone, be exonerated from performance of the duties assumed by it, or which the law demands it to perform? The decisions uniformly return a negative answer. Railroad Co. v. Commission, 130 La., 1012, 58 South., 862; State v. Railway, 239 Mo., 196, 143 S. W., 785; Railroad Co. v. Commission, 152 Wis., 654, 140 N. W., 296; Railroad Co. v. Commission, 54 Colo., 64, 129 Pac., 506; Nelson v. Railroad Co., 8 Wis. Ry. Com., 685. . . .

"But, to render invalid or unreasonable a statute, or an order of a commission, requiring adequate passenger service on any line, it must appear that the revenues of the entire system, or, according to some authorities, from that part of it which lies within the state, are not sufficient to meet the additional expenses necessary therefor, with a fair margin of profit. Railroad Co. v. Commission, 130 La., 1012, 58 South., 862; State v. Railway, 239 Mo., 196, 143 S. W., 785; Railroad Co. v. Commission, 152 Wis., 654, 140 N. W., 296; Nelson v. Railroad Co., 8 Wis. Ry. Com., 685."

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	CONTENTS	Page
	<b>RATES</b>	195
Indianapolis, Indiana		195
	<b>COURT DECISIONS</b>	195
New Jersey		195
	<b>COMMISSION DECISIONS</b>	199
Pennsylvania		199
New Hampshire		200
District of Columbia		200
Wisconsin		201
Interstate Commerce Commission		202
	<b>COURT DECISIONS</b>	203
New York		203
West Virginia		204
Tennessee		206
	<b>REFERENCES</b>	207
Rates		207
Investment and Return		208
General		208
Court Decision References		208



# Rate Research

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Vol. 6

CHICAGO, DECEMBER 24, 1914

No. 13

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### INDIANAPOLIS, INDIANA.

#### 720—Rate Schedules.

An error occurred in last week's issue (6 RATE RESEARCH 195) in the statement of rates of the MERCHANTS HEAT AND LIGHT COMPANY filed with the INDIANA PUBLIC SERVICE COMMISSION.

Under the Wholesale Electric Energy Schedule, the Demand Charge was stated as \$1.25 per "kilowatt-hour" instead of per "kilowatt" per month. The rate should read as follows:

#### WHOLESALE ELECTRIC ENERGY SCHEDULE

##### Rate.

##### Demand Charge.

\$1.25 per kilowatt per month, plus an

##### Energy Charge of

1 cent per kilowatt-hour metered on the primary side of the transformer.

## COURT DECISIONS

### NEW JERSEY.

#### 300—Investment and Return.

PUBLIC SERVICE GAS COMPANY VS. BOARD OF PUBLIC UTILITY COMMISSIONERS, ET AL. Decision of the NEW JERSEY COURT OF ERRORS AND APPEALS, December 9, 1914. (Begun in 6 RATE RESEARCH 180).

#### 315.4—Franchise Value.

"The respondents, then, must take and sustain this position: That although by numerous decisions, of the Supreme Court, Court of Chancery, and of this Court, it has been repeatedly declared that the privilege given to public utility corporations, either directly by

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EDITORIAL NOTE.—All indented matter is direct quotation.

the State, or partially by the State and partly by the municipality as a State agency, and whether exclusive or not, is a franchise, and as a franchise is property, to which the utility in a proper case may assert its special right as against an usurper, and as property is subject to taxation, at the will of the legislature, upon a substantial valuation fixed by the taxing authorities; and though its bestowal may be, and in most cases is, conditioned upon a substantial valuable consideration in money or contract obligation, yet when in the exercise of its rate regulating power the legislature deposes an agency to determine a valuation as a basis for the rate, such agency may disregard the unquestionable value that is attached to the franchise for the purpose of yielding an income to the State or its subdivisions, and declare that such franchise has only nominal value for the purpose of yielding income to the utility. We cannot agree to such a proposition. We are aware that some courts have held that a valuation for taxation is not necessarily identical with valuation for rate regulation. This may be so in a measure. Indeed it is readily conceivable that if the franchise were exempt, as it was claimed to be under the act of 1903 (*North Jersey Railway Co. v. Jersey City*, supra), the rate valuation might exceed the tax valuation by the value of the franchise. But normally, when all the corporate property is subject to taxation and also valued for rate regulation, it would seem reasonable to say that the owner of the property is entitled to a fair income on property for which it is taxed. The fact that the State, or the municipality or both, have seen fit to confer a franchise in many cases as a gift (so-called), or for a consideration deemed inadequate in view of the advantages conferred, does not, as it seems to us, create any implication in the grant that the value of the franchise should be disregarded in fixing a reasonable rate. Counsel for the company argue that the case of *Willecox v. Consolidated Gas Co.*, 212 U. S., 19, is controlling on this point. *Per contra* it is argued that that decision does not touch the question at issue in that it expressly limits the ruling to cases arising on similar facts. But a reading of the entire opinion will demonstrate, we think, that it is fundamentally grounded on the propositions that franchises are an essential element of the property valuation, that they have a substantial value, and that they should be regarded in fixing a rate. Indeed, the court went so far as to put its *imprimatur* on a franchise value corresponding to an increase in the par value of the stock at the time of the consolidation; and this was the feature especially limited to the case under consideration. In *Smyth v. Ames*, 169 U. S., 466, 544-547, the same court discountenanced excessive valuation or fictitious capitalization as a basis of rates, but said that (among other things) the amount and market value of the bonds and stock were matters for consideration and were to be given such weight as might be just and right in each case. This corresponds rather closely with the method adopted by the State Board of Assessors in the case of *Central R. R. Co. v. State Board*, 20 Vroom, 1, 7.

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**840—Public Operation.**

“Recurring to the argument that these special or municipal franchises are given to the utility, or contributed by the public, and therefore should not be estimated in fixing a rate, we repeat that the minor premise is an unwarranted assumption of fact. A municipality desires street car or gas service. It can, if so authorized by the legislature, build and operate its own plant and equipment. Perhaps the cost of installation is too great, so that there would be no sale for the bonds, or the citizens are unwilling to shoulder the interest charge; perhaps, also, the usual extravagance in operation due to public ownership is a deterrent. It is common knowledge that in this country a public utility is usually operated by the public at a loss or an inadequate return. The economic advantage of private ownership is generally recognized. In this situation, a company is organized and asks for a franchise. The risk is all that of the organizers; nothing is risked by the municipality. If it fails, they lose their money. It must operate, however, so long as it does operate, at a reasonable rate, based on a theoretically economical plant and operating expense. It cannot charge the public more than the service is worth, just because otherwise it will not meet its operating expenses and fixed charges. It must pay its taxes, whether it earns them or not. In short, all such franchises are based on a consideration, viz., the risk and obligation undertaken by their grantees; and it will not do to say that the franchise is a public contribution exclusively.

**831—Purchase by Municipality.**

“If the plant and franchise be taken over by the public, the franchise must be paid for like any other property. *Monongahela Nav. Co. v. U. S.*, 148 U. S., 312; *Brunswick & Topsham Water Dist. v. Maine Water Co.*, 99 Me., 371, 59 Atl., 537. In the latter case the legislature expressly recognized that it should be paid for, but the court did not rest on that; on the contrary it said that even in cases where by statute, franchises were not to be included in the valuation, the court conceived that it must have been implied that the property was to be valued as rightfully where it was, and rightfully to be used; adding that the right to use, and charge reasonable tolls, were the franchises, at any rate the most important ones. Our own legislature has in like manner enacted that certain cities may acquire existing waterworks from their owners by purchase or condemnation; and in such case the property acquired includes the franchises the value of which is to be a part of the award. P. L. 1906, p. 664; C. S. 850, 852, especially Section 7, pl. 960. Other such acts no doubt are on the statute book. And such franchises are in no sense exclusive; for by the very act cited cities affected thereby may ignore an existing plant and build their own waterworks, subject only, by other legislation, to the approval of the State Water Supply Commission. This was exactly what was attempted in *Collingswood v. State Commission*, 84 L. 104, 85 L., 673, and denied on the ground,

not that the existing franchise was exclusive, for it was not, but because the Commission in the exercise of power conferred on it, decided that such new plant was not needed.

"If, as we think is the law, substantial allowance should be made for the franchise of a gas plant if taken for public use, and the value of such franchise paid in money to the owners thereof, we fail to see why, so long as the plant and franchise possessing that value for sale or condemnation are held and operated by the owners, the latter should not be entitled to a reasonable income on all elements of their property including the franchise, in the absence of any charter reservation or contract to the contrary. As was said by the Supreme Court of Maine in the Brunswick case, *ubi supra*, 'we apprehend that some difficulty in discussion has arisen from attempting to differentiate in logic what is inseparable in fact. The property taken is a single thing, to which belong certain characteristics which affect its value.'

#### 315.4—Franchise Value.

"We do not wish to be understood as laying down the doctrine that the value of the franchise is to be measured necessarily by the total market value of outstanding capital stock and indebtedness, less physical valuation and development cost, because this would take no account of inflation of stock value; but if such market value added to indebtedness show an excess, such excess is at least evidential that where there are special franchises, such franchises have some substantial value in excess of the mere outlays for legal advertising and other legitimate expenses in obtaining them. This element was, apparently, expressly excluded both by the Commission and by the Supreme Court. This exclusion, in our opinion, was error. We think there was evidence before the Commission to indicate that from this standpoint the franchises had a substantial value which the Commission refused to give to them, and as the ninety-cent rate fixed by the Commission was based on the theory of providing a net income of eight per cent on the total value of the property of the company, the finding of fact that such rate was just and reasonable was in direct violation of the fundamental theory on which the Commission undertook to fix the rate, and is presumably not justified by it. On the appeal of the Gas Company, therefore, the judgment of the Supreme Court will be reversed and the order fixing the ninety-cent rate will be set aside."

#### 340—Rate of Return.

Confirming the opinion of the Board and the lower court as to the rate of return the court says:

"With respect to the eight per cent rate, it is proper to say that the attack thereon made in the Supreme Court appears to have been rather formal than substantial—at least it was so regarded by the court—and no very special stress was laid upon it here. At the same time we have given it due consideration, and it is sufficient to

say that upon an examination of the case we conclude that there was sufficient to support the finding below that eight per cent upon the true value of the properties is a fair and lawful rate of income to be taken into consideration with the expenses and other outgo in determining what price should be charged to the consumers for gas."

## **COMMISSION DECISIONS**

### **PENNSYLVANIA**

#### **132.2—Fair Rates and Efficient Service.**

BOROUGH OF LEWISTOWN V. PENN CENTRAL LIGHT & POWER COMPANY, Alleging that the Company's Rates for Electric Service Were Unreasonable and Discriminatory. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, Dismissing the Complaint, November 6, 1914.

The complainant alleges that the rate for electric service in the Borough of Lewistown is discriminatory and excessive. The company charges 12 cents in Lewistown and 3 cents for similar service in Huntingdon.

The company in serving Huntingdon, is in competition with another company and has been losing customers even at the low rate of 3 cents.

The Board says:

"From the evidence produced at the hearing it seems plain that when considering Lewistown alone, without reference to Huntingdon, the rates do not appear to be excessive nor do they appear to be in excess of what would be considered a legitimate income for the amount of capital invested in that borough. The Commission does not consider it fair to order the reduction of a rate, which by the evidence is shown to be fair and reasonable, on account of the fact that in another community the company is furnishing current at a price below the cost thereof.

"The evidence also shows that if the respondent should increase their rates in the borough of Huntingdon they would undoubtedly have a decrease in the number of customers, as well as in their revenue, as they are now unable to retain many of their customers who have changed and are now connected with another electric company.

"While the evidence seems to be conclusive that the patrons of the Company in Huntingdon are paying less than what could be considered a reasonably fair rate, on the other hand, if the respondent should increase their rates and lose their present revenue, their plant would be useless and be almost a total loss to the stockholders of their company. The present rates of the Company in Huntingdon were made for the purpose of meeting competition, otherwise the Company would lose its customers, and the large investment in that borough would be a loss to the stockholders."

"It appears, therefore, that the rates of respondent in the borough of Lewistown are just and reasonable, and it is hereby directed by the Commission that an order be entered dismissing the complaint in this case."

### **NEW HAMPSHIRE**

#### **126.1—Improvement of Service.**

ROCKINGHAM COUNTY LIGHT & POWER CO. v. CLARA B. FRENCH ET AL. Relocation of an Electric Line. Decision of the NEW HAMPSHIRE PUBLIC SERVICE COMMISSION, Holding that Relocation is Necessary and Fixing the Compensation for Rights Over Respondents' Properties. November 25, 1914.

The applicant is an electric utility, with a power plant located in Portsmouth, from which it transmits electric energy into the principal towns in Rockingham County. The petitioner found it necessary, in order to meet the reasonable requirements of service to the public, to construct, straighten and relocate certain sections of one of the transmission lines of the petitioner. The petitioner could not agree with the respondents as to the necessity for the requisite rights, nor as to the compensation to be paid therefor. The Commission was asked to determine that such rights are reasonably necessary and to fix the compensation to be paid. The Commission says:

"The existing transmission line is crooked, expensive to maintain and liable to frequent breaks. Upon all the evidence we find that it is necessary in order to meet the reasonable requirements of service to the public, to locate and straighten the same and to construct the proposed line, and for said purpose to take the rights and easements described in the petition."

An order was entered specifically setting forth and describing the rights and easements thus found to be necessary, in order to establish the new right of way, and fixing the compensation to be paid the respondents granting the necessary rights.

### **DISTRICT OF COLUMBIA**

#### **226.2—Extension of Mains.**

REGULATION FOR EXTENSION OF GAS MAINS AND GAS SERVICE. Decision of the DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION, October 28, 1914.

The Commission has prescribed the following regulation in regard to the extension of the service of gas companies:

“Upon application to serve premises with gas, the gas light company shall extend its main, without cost to the applicants, a distance of 125 feet in length per house to be connected with the extension provided that this length of extension is sufficient to reach the premises. In cases in which this length of extension is not sufficient to reach the premises, the gas light company shall make the entire extension provided that the applicants deposit with the gas light company 75 cents per lineal foot of further extension necessary, the applicants to receive no interest on the deposit, and the deposit to be returned by the gas light company to the depositors at the rate of \$93.75 (the amount of deposit to cover 125 feet in length of the extension), for each additional house served from the extension, until the entire amount of the deposit is returned.

“These regulations shall not be construed as requiring a gas light company to extend its mains in streets that are not at or near established grade, nor as prohibiting a gas light company from making extensions of mains of greater length than required herein.

“Upon application for connection between a gas main and a house, the entire installation of the gas service pipe from the main to the meter shall be made by the gas light company, and half the cost thereof shall be borne by the gas light company and half by the applicant.

“The gas light companies shall hereafter maintain and bear the expense of maintenance of the entire service pipe.

“Petition may be made to the Commission for special action in any case in which it is claimed that the application of these regulations causes injustice.”

## **WISCONSIN**

### **840—Public Operation.**

Application of the KENOSHA MUNICIPAL WATER PLANT for Authority to Increase its Rates. Decision of the WISCONSIN RAILROAD COMMISSION, Providing for an Increase in Revenue, November 24, 1914.

The City of Kenosha as a water utility applied to the Commission for authority to increase its water rates to private consumers. The city alleged that increased revenue is necessary in order to provide an adequate and pure water supply. The Commission investigated the city's investment in the plant and the revenue and expenses of the department. The decision says:

“At the last municipal election in Kenosha, the proposal to issue bonds to finance extensions to the water plant was before the voters of the city, and was defeated. Consequently, the water commission is confronted with the necessity of finding some other method of financing the needed improvements. It is not expected that the increase in rates asked for would immediately furnish the funds

needed for the construction of the intake and the improvement of the distribution system, but it seems to have been the attitude of the city officials that some increase in revenues was necessary in order to improve the credit of the utility itself, so that money might be borrowed in other ways than as a general liability of the city. . . . If it were not for the fact that the city has no other means available of financing improvements in its water plant except such as are dependent upon the earnings of the utility itself, it might not be necessary to authorize any increase in revenues at this time. . . . No other method of financing the improvements than by a general improvement of the credit of the utility appears possible."

The Commission held that the rates for general service should not be increased, and ordered that the City of Kenosha pay the water department for fire protection a sum approximately equal to the amount of increase asked for in the city's petition.

## **INTERSTATE COMMERCE COMMISSION**

### **300—Investment and Return.**

Decision of the INTERSTATE COMMERCE COMMISSION, Permitting Advance in Freight Rates in Official Classification Territory. December 18, 1914.

The Commission allowed the advance in rates on account of the unfavorable financial and industrial conditions caused by the European war, and because the latest reports of the carriers show a much more serious decrease in net revenue than appeared when the 5 per cent increase was denied on July 29. The decision says:

"Whatever the consequences of the war may prove to be, we must recognize the fact that it exists, the fact that it is a calamity without precedent, and the fact that by it, the commerce of the world has been disarranged and thrown into confusion. The means of transportation are fundamental and indispensable agencies in our industrial life, and for the common weal should be kept abreast of public requirements. . . .

"For the fiscal year just ended the net operating revenues, as shown by the carriers, are lower than was estimated or anticipated when the original report was issued. Not since 1908 have the net operating revenues of the carriers been so low as in the fiscal year ending June last. . . .

"We cannot view with favor any attempt to obtain an increase in net revenue through unduly restricted expenditure upon maintenance.

"The conflict in Europe will doubtless create an unusual demand upon the world's loan fund of free capital, and may be expected to check the flow of foreign investment funds to American railroads. It appears that our railroads represent the bulk of European investment in this country."



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**COURT DECISIONS****NEW YORK****112—Franchises.**

THE VILLAGE OF FREDONIA V. FREDONIA NATURAL GAS LIGHT COMPANY, et al. Suit to Forfeit Defendant's Franchise for Non-User. Decision of the NEW YORK SUPREME COURT, Equity Term, Chautauqua County, Dismissing the Complaint, November, 1914. 149 New York Supplement 964.

The Village of Fredonia brought suit against the Natural Gas Light Company to forfeit defendant's franchise for non-user and to restrain defendant from exercising any rights or privileges under its special franchise to lay gas pipes in the streets. The court held that:

"Plaintiff has no standing in court to maintain an action to forfeit or to declare forfeited the *general rights* of the defendant company to transact business or to enforce merely private rights. The franchise to do business sprang from the state, and the extinction of that franchise from non-user should be determined only in a litigation between the people of the state of New York and the defendant. It does not appear that any serious or permanent interference with the public use of the village streets is threatened. Private persons, if threatened with injury, have their own remedy. New York v. Bryan, 196 N. Y. 158, 89 N. E. 467.

"The sole question is whether the plaintiff has established forfeiture by non-user of the special franchise which it granted to defendant's predecessor to lay pipes in the streets. The pipes are still there, and, should the village or its citizens furnish a profitable market for defendant's gas, it could supply them. The only reason why it has no customers is that in the Spring of 1911, it could not afford to supply them on account of competition and therefore temporarily suspended business. Its conduct has not been willful and without justification, nor has the public suffered therefrom. It is not every non-user that will furnish grounds for a forfeiture. To work a forfeiture there should be something wrong, and not only a wrong, but one arising from willful abuse or improper neglect—such neglect as indicates an indifference to the demands of public duty. People v. B. & R. Turnpike Co., 23 Wend. 236; People v. Atlantic Ave. R. R. Co., 125 N. Y. 513, 26 N. E. 622.

"Forfeiture is a punishment for fault, not for misfortune. But I fail to see wherein the defendant has failed to exercise its special franchise. Its pipes were laid subject to no conditions as to the delivery of gas, either to the village or to private customers. The franchise contains no condition, express or implied, that the company shall continue to supply gas at a loss. Nor does it appear that any demand has been made upon defendant to furnish gas, since it

ceased to manufacture same. The village of Fredonia is not injured by the unused pipes in its streets, nor will it be injured if other streets are opened and pipes laid thereunder to supply customers. The license or permission to lay such pipes remains intact. The village has not even attempted to revoke it, except by bringing this action, which seems to be in the interest of the rival company, rather than the village as such. A competitor should not be thus eliminated unless the law plainly so declares."

## WEST VIRGINIA

### 220—General Powers of Commissions.

CITY OF BENWOOD et al. v. PUBLIC SERVICE COMMISSION. Decision of WEST VIRGINIA SUPREME COURT OF APPEALS. October 13, 1914.

The Benwood and McMechen Consolidated Water Company made application to the Public Service Commission for a change in rates for water furnished by the Benwood and McMechen Consolidated Water Company to the public in the City of Benwood. The city and certain of its citizens resisted the application, claiming that the commission was without power to change the rates, since, at the time of the city's grant of the franchise under which the company operated the rates for water to be furnished under the franchise were determined therein. The commission overruled this ground of objection and ordered a hearing on the grounds of the application. Thereupon, the city and its citizens, further insisting upon their objections brought the proceedings into court.

### 224.5—Rates Fixed by Contract.

"The case presents squarely the question: May the Public Service Commission alter a rate that was fixed by franchise ordinance prior to the enactment of the law by which the commission was created and given powers? . . .

"Though the grant and acceptance of the franchise wherein certain rates were fixed, created a contract between the water company and the City of Benwood, the rates thereby fixed are nevertheless cognizable for revision by the Public Service Commission under the broad powers delegated thereto, unless prior to the delegation of those powers the Legislature had expressly delegated power to the City of Benwood which authorized the city to contract inviolably for the rates mentioned in the franchise for the period stated therein. Rate-making is a legislative act. It is inherent in and belongs primarily to the Legislature. The rate-making power is a power of government—a police power of the State. The City of Benwood at the time of the granting of the franchise, had no rate-making power that could bind the State, if the Legislature of the sovereign

State had not theretofore delegated the same to the city. And if such delegation or grant of rate-making power was made to the city prior to the delegation of general and state-wide powers in the same particular by the Legislature to the Public Service Commission, the language relied upon as evidence of such delegation or grant to the city must be clear and express. The presumption is against exclusive delegation of the Legislature's sovereign rate-making power to a municipality. Unless there has been such delegation by clear and express terms, the power is reserved in the state, which can exercise it at such times and to such extent as may be found advisable. *Improvement Co. v. Bluefield*, 69 W. Va. 1, 70 S. E. 772, 33 L. R. A. (N. S.) 759; *Judy v. Lashley*, 50 W. Va. 628, 41 S. E. 197, 57 L. R. A. 413; *State ex rel. Webster v. Superior Court*, 67 Wash. 37, 120 Pac. 861, Ann. Cas. 1913D, 78; *Milwaukee E. R. & L. Co. v. Railroad Commission*, 153 Wis. 592, 142 N. W. 491. *Home Telephone and Telegraph Co. v. Los Angeles*, 211 U. S. 265, 29 Sup. Ct. 50, 53 L. Ed. 176. . . .

"It did grant the power to erect, or authorize or prohibit the erection of gas works, electric light works, or water works in the city. But this general grant does not give power to fix rates by franchise or agreement beyond the control of the legislature. For a municipal corporation to claim the power to fix rates inviolably, it must show clear and express delegation of the same to it from the Legislature. The Supreme Court of the United States, in *Home Telephone & Telegraph Co. v. Los Angeles*, supra, said: 'It has been settled by this court that the State may authorize one of its municipal corporations to establish by an inviolable contract the rates to be charged by a public service corporation (or natural person) for a definite term not grossly unreasonable in point of time, and that the effect of such a contract is to suspend, during the life of the contract, the governmental power of fixing and regulating the rates. \* \* \* But for the very reason that such a contract has the effect of extinguishing pro tanto an undoubted power of government both its existence and the authority to make it must clearly and unmistakably appear, and all doubts must be resolved in favor of the continuance of the power.' But the City of Benwood says it had the right given it by the legislature charter to 'contract and be contracted with.' True, this general provision usually found in municipal charters is in the charter of the City of Benwood. But that provision can not be construed as delegating beyond legislative control the power to fix public service rates. For, as we have seen, the presumption is against such delegation of the power. The delegation 'must clearly and unmistakably appear.' It does not so appear in the general provision merely to contract and be contracted with. "We do not say that the contract as to rates contained in the franchise was not good as between the water company and the city as long as the Legislature did not exercise its superior and supreme power over the subject of rates. From the general powers to establish water works and to contract and be contracted with impliedly

the city had the power to contract in the matter of rates for water furnished the public as long as the Legislature did not exercise its reserved power in that particular. But that implied power was inferior to the reserved power. . . .

"The water company and the city in the making of the so-called franchise contract were bound by cognizance of the fact that their dealings were subject to future exercise of the Legislature's power over rates for water furnished the general public in the locality. Hence the franchise was made subject to what the Legislature might thereafter do as to the rates dealt with by the franchise. . . .

"There can be no impairment of the contract by the act of the State in claiming its own, when it is not bound by contract. The supervision and regulation of the rate by the state, through the Public Service Commission, does not take from either of the parties to the contract any right which they had thereunder. Such supervision and regulation does not therefore, impair the obligations of a contract. *Home Telephone and Telegraph Co. v. Los Angeles*, supra; *State ex rel. Webster v. Superior Court*, supra; *Knoxville Water Co. v. Knoxville*, 189 U. S. 434, 23 Sup. Ct. 531, 47 L. Ed. 887; *Railroad Co. v. Mottley*, 219 U. S. 467, 31 Sup. Ct. 265, 55 L. Ed. 297, 34 L. R. A. (N. S.) 671; *Wyandotte County Gas Co. v. Kansas* 231 U. S. 622, 34 Sup. Ct. 226, 58 L. Ed. 404; *Dawson v. Dawson Telephone Co.*, 137 Ga. 62, 72 S. E. 508.

"Perceiving that the Public Service Commission is acting within its powers, we decline to interfere. The petition asking for relief here will be dismissed."

## **TENNESSEE**

### **241—Investigations.**

UNITED STATES V. NASHVILLE C. & ST. L. RY. Decision of the DISTRICT COURT, M. D. TENNESSEE, NASHVILLE DIVISION, September 4, 1914. 217 Federal 254.

The Interstate Commerce Commission was directed by a resolution of the Senate to investigate and report on the relations existing between defendant and other railroads. In making this investigation the examiners for the Commission applied for complete and unlimited access to the general correspondence files in the offices of the defendant company. This request was refused but the company permitted the examination of their accounts, records and memoranda. The applicant then applied for a writ of mandamus against the defendant to compel the railway company to disclose to the examiners employed by the Commission the correspondence files and indexes.

The court holds that the resolution of the Senate is not a law and may not confer upon the Interstate Commerce Commission any jurisdiction further than that conferred by the Interstate Commerce Act, and the

court further finds that the defendant in refusing the examiner access to its general correspondence files as demanded by him, neither failed to comply with, nor violated, any provision of the Interstate Commerce Act or of its amendments, and hence the plaintiff is, all other considerations aside, not entitled under the Act, to the writ of mandamus sought.

The court says:

"After careful consideration, I have reached the conclusion that the 'accounts records and memoranda' of common carriers to which the Commission is given the right of access and examination are those whose form it is, by the sentence immediately preceding, authorized to prescribe; and that the phrase 'accounts, records, and memoranda' as used in this section of the Act [Sec. 20], does not relate to correspondence or other original papers or documents in the possession of the carriers, constituting part of their business acts and transactions but to the records of such acts and transactions, including the movements of traffic as well as accounts of receipts and expenditures, which the carriers are required to enter 'on the books and in the manner' and forms which the Commission may prescribe, constituting book entries of their acts and transactions, in the nature of a general system of accounting, which shall be at all times subject to inspection and examination by the Commission."

## REFERENCES

### RATES

#### 720—Rate Schedules.

MINNESOTA PUBLIC UTILITY RATES—ELECTRIC, GAS AND WATER. Compiled by the Municipal Reference Bureau of the General Extension Division, University of Minnesota, by GERHARD A. GESELL. Bulletin 254 pages. October, 1914.

The bulletin contains rates and information in regard to municipal and private plants in cities and villages of Minnesota having over 500 population. Numerous inquiries have been received since the organization of the Municipal Reference Bureau asking for comparative data on the operation of public utilities in Minnesota municipalities, and the bulletin aims to provide this information.

#### 510—Forms of Rates.

DEMAND ELECTRIC RATES AS AFFECTED BY COMMISSION REGULATION, by L. R. NASH.  $5\frac{1}{2}$  pages, *Stone & Webster*, December, 1914, P. 432.

A brief resume is given of the development of a form of electric rates which takes into consideration load factor. A number of rate papers are mentioned, and references are given to decisions of various Commissions which would reflect the attitude of these commissions in the matter of rate structure. The Wisconsin, California, New York, New Jersey, Illinois, Missouri, Kansas and Ohio Commissions are listed as wholly or in part committed to demand rate schedules; and Massachusetts, Georgia, Arizona, Nevada and Montana are mentioned as having expressed some preference for other forms of rates.

## INVESTMENT AND RETURN

### 300—Investment and Return.

ANSWER TO THE REPORT OF MR. ARTHUR C. KING, on Electric Rates of the UNION GAS AND ELECTRIC COMPANY, Cincinnati, Ohio. Pamphlet, 35 pages. December 14, 1914.

The Union Gas and Electric Company submitted a report on the valuation of their property and on the electric rates of the company, in answer to the report made for the City by Mr. Arthur C. King. Mr. King's Report was abstracted in 6 RATE RESEARCH 131.

## GENERAL

### 980—Public Relations.

FUNDAMENTAL PLANKS IN A PUBLIC UTILITY PROGRAM, by DELOS F. WILCOX. 1 Page, *Engineering News*, December 17, 1914, p. 1-105.

The article is an abstract from a paper read before the American Mayors' Conference, held at Philadelphia, Pennsylvania, November 13 to 14, 1914; and outlines the relation which, according to the writer, should exist between cities and their public utilities. The writer's fundamental conclusions are in brief as follows:

(1) Public-utility investments should be placed upon a non-speculative basis, and their security should approximate that of municipal bonds. The city should assume the risk of loss due to unforeseen causes but should not undertake to make good past losses. (2) Public-utility should receive proper payment for service rendered and should not be regarded as a legitimate source of profit to be used for the relief of general taxation. (3) In their franchise grants, cities should assume that all the well established utilities will sooner or later be publicly owned, and steps should be taken which would gradually bring about the withdrawal of private capital from public streets and the gradual acquisition of the utility plants by the cities as public property.

## COURT DECISION REFERENCES.

### 840—Public Operation.

UNION ICE AND COAL COMPANY V. TOWN OF RUSTON. Decision of the LOUISIANA SUPREME COURT, May 25, 1914. 66 Southern 262.

The town sought to establish an ice manufacturing plant to be operated in connection with its water and electric light plant for the production of ice to be sold to the inhabitants of the town. The plaintiff, in its quality of a tax payer, brought suit to annul the ordinance providing for the plant. The court held that the city could not use its taxing power, except for a "purpose strictly public in its nature." The question, therefore, to be decided was whether the ice manufacturing and selling enterprise is a public purpose. A number of court decisions were reviewed and the court concludes that in the light of the decisions of courts and general practice there is no question but that the making of ice for sale is not a municipal function. Therefore, the ordinance providing for the exercise of the taxing power in the promotion of the ice plant enterprise is unconstitutional and void.

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# Rate Research

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CONTENTS	Page
<b>RATE RESEARCH</b> .....	211
Announcement of Bound Volumes .....	211
Rate and Rate Regulation Library .....	211
<b>COMMISSION DECISIONS</b> .....	218
Wisconsin .....	218
Illinois .....	219
Florida .....	220
California .....	221
Louisiana .....	221
<b>REFERENCES</b> .....	222
Court Decision References .....	222



# Rate Research

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Vol. 6

CHICAGO, DECEMBER 31, 1914

No. 14

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATE RESEARCH

Back numbers of RATE RESEARCH are available in bound form for Volumes II to V inclusive. These volumes contain all the weekly issues of RATE RESEARCH from October 2, 1912 to September 23, 1914 and each volume contains the issues for half a year. The last issue in Volume V, the number for September 23, 1914, gives a classified index for all numbers to date of that issue. Bound volumes of RATE RESEARCH can be obtained at \$8.00 per volume.

## RATE AND RATE REGULATION LIBRARY

The list of books covering rates and rate regulation as applied to electric utilities which was published in 2 RATE RESEARCH 276, is here given, revised and brought up to date.

## COMMISSION REPORTS AND PROCEEDINGS

Lists of commission publications have been sent to the various commissions for the purpose of having them checked for omissions and later issues. Answers have not been received in every instance, but additions may be noted in RATE RESEARCH as soon as RATE RESEARCH is advised of their publication. Some Commissions publish Reports of Decisions and Annual Reports in separate volumes. In these instances the Annual Report contains chiefly abstracts of the financial reports of the utilities under their jurisdiction. Other commissions publish only the annual report and in listing these publications valuable material, in addition to the statistical reports have been noted in order to give an idea of their contents. Where a charge is made for any of the publications, the price is noted.

The date of the law giving the Commission authority over electric utilities is given in each instance, and the date when effective, if different.

**ARIZONA CORPORATION COMMISSION**

May 28, 1912, Effective June, 1912.

**Annual Reports.**

First Annual Report, February 14, 1912, to December 1, 1913.  
(Decisions, Commission Law, Corporation Laws, Rules of Practice  
and Procedure, Uniform Classification of Accounts.)

**CALIFORNIA RAILROAD COMMISSION**

December 23, 1911, Effective March 23, 1911.

**Reports of Decisions.**

Volume 1, January 1, 1911, to December 31, 1912.

Volume 2, January 1, 1913, to June 30, 1913.

Volume 3, July 1, 1913, to December 31, 1913.

**Advance sheets** of decisions can be procured at 5 cents per copy or at 50 cents per month, and bound volumes, at \$1 50.

**Annual Reports.**

First Annual Report, June 30, 1912, to June 30, 1913. (Commission  
Laws.)

**Public Utilities Act of California**, compiled by Eugene R. Hallett, 1912.

**COLORADO PUBLIC UTILITIES COMMISSION**

April 12, 1913.

**Annual Reports.**

(None yet issued).

**CONNECTICUT PUBLIC UTILITIES COMMISSION**

September 9, 1911.

**Annual Reports.**

First Annual Report, September 9, 1911, to June 30, 1912. (De-  
cisions.)

Second Annual Report for year ending June 30, 1913. (Decisions  
and Rate Schedules of Electric Companies.)

**DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION**

March 4, 1913.

**Annual Reports.**

Report for 1913. (Decisions and Commission Law.)

**GEORGIA RAILROAD COMMISSION**

August 22, 1907.

**Annual Reports.**

All matters relating to electric companies are contained in volumes  
beginning with the 35th Annual Report for 1908, and continuing up

to the 41st Annual Report, for the year ending April 1, 1913.

Report for 1913. (Decisions, General Rules and Orders and Commission Law.)

### **IDAHO PUBLIC UTILITIES COMMISSION**

March 13, 1913, Effective sixty days after  
final adjournment of the legislature.

#### **Annual Reports.**

(None yet issued.)

### **ILLINOIS PUBLIC UTILITIES COMMISSION**

June 30, 1913, Effective January 1, 1914.

#### **Reports of Decisions.**

First Report from January 1, 1914, to May 1, 1914. (Reports annually thereafter.)

**Illinois Public Utilities Law and Municipal Ownership Law**, compiled by William J. Norton, 111 W. Monroe St., Chicago. \$2.00 net, postpaid.

### **INDIANA PUBLIC SERVICE COMMISSION**

March 4, 1913, Effective May 1, 1913.

#### **Annual Reports.**

(None yet issued.)

### **KANSAS PUBLIC UTILITY COMMISSION**

May 22, 1911.

#### **Annual Reports.**

First Annual Report, May 22, 1911, to November 30, 1912. (Important Decisions, Electric Rate Theory and Law.)

**Kansas Railroad and Public Utilities Law as it Concerns the Public Utilities Commission**, compiled by John Marshall.

### **MAINE PUBLIC UTILITIES COMMISSION**

Referendum Vote, September 28, 1914.

#### **Annual Reports.**

(None yet issued.)

### **MARYLAND PUBLIC SERVICE COMMISSION**

April 5, 1910.

#### **Annual Reports.**

Volume 1 for eight months ending December 31, 1910. (Decisions, Rules of Practice and Procedure and Summary of Meter Tests.)

Volume 2, for 1911. (Decisions, and Summary of Meter Tests.)

Volume 3, for 1912. (Same.)

Volume 4, for 1913. (Same.)

**Public Service Commission Law of Maryland with Rules of Commission and Forms**, by John Philip Hill and Arthur R. Padgett.

**MASSACHUSETTS BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS**

June 8, 1887.

**Annual Reports, 1886-1913.**

The first two Annual Reports were of the Board of Gas Commissioners.

Third Annual Report issued January, 1888, is the first to relate to electric companies.

The Twenty-ninth Annual Report for the year ending June 30, 1913, is the last report issued. (Decisions, Court Decisions and New Legislation.)

Some of the annual reports for late years are still in print.

**Reports of Decisions**, issued in pamphlet form.

**MICHIGAN RAILROAD COMMISSION**

May 19, 1909 (electric rates) and May 26, 1909 (stocks and bonds).

**Annual Reports.**

Third Annual Report for 1909. (Abstract of Laws as amended in 1909.)

Fourth Annual Report for 1910. (Decisions.)

Fifth Annual Report for 1911. (Same.)

**Reports of Decisions**, issued quarterly.

50 cents per volume of four numbers.

**MISSOURI PUBLIC SERVICE COMMISSION**

March 17, 1913, Effective April 15, 1913.

**Reports of Decisions.**

Advance Sheets of Volume 1, April 15, 1913, to June 29, 1914.

35 cents per copy or \$2.50 per volume, which includes the receipt of advance sheets.

**Annual Reports.**

First Annual Report for eight and one-half months ending December 31, 1913.

**MONTANA PUBLIC SERVICE COMMISSION**

March 4, 1913.

**Annual Reports.**

First Annual Report for the Public Service Commission—

Sixth Annual Report of the Railroad Commission, for year ending November 30, 1913.

(Decisions, Commission Law and Rules of Practice and Procedure.)

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**NEBRASKA STATE RAILWAY COMMISSION**

Stock and Bond jurisdiction only, 1909.

**Annual Reports.**

Fourth Report, for year ending November 30, 1911.

(Decisions, Court Decisions, Accounting Rules for Electric Companies, Physical Valuation Report of Commission Engineer.)

Fifth Report, for year ending November 30, 1912.

(Decisions, Court Decisions, Physical Valuation Report of Commission Engineer.)

Sixth Report, for year ending November 30, 1913.

(Same, and Report on "Blue Sky Law.")

**NEVADA PUBLIC SERVICE COMMISSION**

March 23, 1911.

**Annual Reports.**

First Annual Report for year 1911—Fourth Annual Report for the Railroad Commission.

(Schedule of Electric Rates, Rules and Regulations for Gas and Electric Service, Safety Regulations for Electric Utilities.)

Second Annual Report for the year 1912.

(Decisions, Rules and Regulations for Gas and Electric Service, Safety Regulations for Electric Utilities, Public Service Commission Law.)

Third Annual Report for the year 1913.

(Decisions, Schedules of Rates for Electric Companies, Public Service Commission Law, Rules and Regulations for Gas and Electric Service, Safety Regulations for Electric Companies.)

**Reports of Decisions.**

Advance sheets issued.

**NEW HAMPSHIRE PUBLIC SERVICE COMMISSION**

April 15, 1911, Effective May 15, 1911.

**Annual Reports.**

Volume I for the year ending November 30, 1911.

(Decisions, Public Service Commission Law, Rules of Practice and Procedure.)

Volume II for year ending August 31, 1912.

(Decisions, Schedules for Electric Companies.)

Volume III for the year ending August 31, 1913.

(Decisions.)

Volume IV, No. 1, September 1, 1913, to April 1, 1914.

(Decisions.)

**Reports of Decisions.**

Advance Sheets issued.

**NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS**

April 21, 1911, Effective May 1, 1911.

**Reports of Decisions.**

Vol. I, May 1, 1911 to June 2, 1913.

Advance Sheets of decisions issued.

**Annual Reports.**

First Annual Report for year 1910. (Decisions, Rates for Gas and Electricity Tabulated, Rules of Procedure.)

Second Annual Report for year 1911. (Decisions, Public Utilities Law, Standards for Gas Service.)

Third Annual Report for year 1912. (Decisions.)

Fourth Annual Report for year 1913. (Decisions, Rules for Electrical Supply Utilities and for all Utilities Owning or Using Poles or Wires.)

**NEW YORK PUBLIC SERVICE COMMISSION (1st D.).**

June 1, 1907, Effective July 1, 1907.

**Reports of Decisions.**

Volume I, July 1, 1907, to September 1, 1909.

Volume II, September 1, 1909, to January 1, 1912.

Volume III, January 1, 1912, to January 1, 1913. Advance Sheets issued monthly.

The first two volumes may be procured at \$3.00. The present subscription price is \$2.00 per volume, including advance sheets. Advance sheets sold separately, 25 cents per monthly pamphlet.

**Annual Reports.**

First Annual Report, 2 vols., for last six months of 1907. (Volume I—Commission Law, History of State Regulation in New York, Rules of Procedure, Court Decisions.)

Second Annual Report, 3 vols., for year 1908. (Volume I—Uniform Systems of Accounts, Report on "Indeterminate Franchise for Public Utilities", "Supervision of Street Railways in England and Prussia".)

Third Annual Report, 3 vols., for year 1909. (Volume I—Recommendations as to Legislation, Report of Meter Tests, Court Decisions.)

Fourth Annual Report, 4 vols., for year 1910. (Volume I—Report of Meter Testing, Electrical Franchises in Greater New York, Electric Rates for New York City. Volume II—Rules of Procedure. Volume IV.—Rate Theory, Load Factor and Rates.)

Fifth Annual Report, 3 vols. for year 1911.

Sixth Annual Report, 3 vols., for year 1912. (Volume I—Electric Rates in New York City.)

**Proceedings.**

Eight volumes covering the proceeding of the Commission from July 1, 1907, to December 31, 1913. Advance Sheets issued monthly.

**NEW YORK PUBLIC SERVICE COMMISSION (2nd D.).**

June 1, 1907, Effective July 1, 1907.

**Reports of Decisions.**

Volume I, July 1, 1907, to April 1, 1909.

Volume II, April 2, 1909, to June 30, 1911.

Volume III, July 1, 1911, to May 7, 1913.

**Annual Reports.**

First Annual Report, 2 vols., for last six months of 1907. (Volume I—Rules of Practice.)

Second Annual Report, 3 vols., for year 1908. (Volume II—Uniform System of Accounts.)

Third Annual Report, 2 vols., for year 1909.

Fourth Annual Report, 3 vols., for year 1910.

Fifth Annual Report, 3 vols., for year 1911.

Sixth Annual Report, 3 vols., for year 1912.

**OHIO PUBLIC UTILITY COMMISSION**

July 1, 1911, New Law, August 9, 1913.

**Annual Reports.**

First Annual Report, for the year 1912. (Decisions, Opinions of Attorney General as to Jurisdiction of Commission, etc.)

**Report of Decisions**, issued in pamphlet form.

**Laws of Ohio Relating to Railroads and Public Utilities**, prepared under the direction of the Commission as of January 1, 1913.

**OKLAHOMA CORPORATION COMMISSION**

Effective, May 19, 1908 (not over Stocks and Bonds.)

**Annual Reports.**

First Annual Report, for the year 1908. (Corporation Laws, Decisions.)

Second and Third Annual Reports, for the year 1909 and 1910. (Corporation Laws, Decisions, Court Decisions.)

Fourth Annual Report, for the year 1911. (Classification of Accounts, Decisions.)

Fifth Annual Report, for the year 1912. (Decisions, Court Decisions, Recommendations to the Legislature.)

(To be Continued)

## COMMISSION DECISIONS

### WISCONSIN

#### 500—Rate Practice.

Application of the WHITEWATER ELECTRIC LIGHT COMPANY for Authority to Adjust Rates. Decision of the WISCONSIN RAILROAD COMMISSION, Granting the Application, December 26, 1914.

The Company applied to the Commission for authority to change its rates and submitted a schedule of new rates to the Commission for approval. The Commission found that the rates then in effect were regressive and that the new rates eliminated this objectionable feature. The Commission says:

“It is possible that there may be a few individual consumers who were so greatly benefited by the old regressive rate that the application of the new rate will not decrease their charges, but as applied to the general body of consumers, there will be a material decrease under the new schedule.”

#### 540—Minimum Charge.

The company asked for authority to put in effect a minimum charge and the decision says:

“The Commission has had occasion in a number of cases to investigate the reasonableness of minimum charges for electric service, and in a general way it may be said that a minimum charge of 75 cents per month has been found reasonable. It is true that in one or two cases which have come before the Commission a minimum charge of 50 cents per month has been established, but we are inclined to believe that 75 cents is reasonable in this case.”

#### 580—Terms and Conditions.

“The Company asks also that it be given authority to charge \$1.50 for re-connection of a meter for the same consumer upon the same premises within one year of the date when service was disconnected. This has been held to be a reasonable provision in other cases before the Commission, and we see no reason for not authorizing such a practice in this case.”



**ILLINOIS****714—Notice for Change of Rate.**

CHANGES IN RATES OF PUBLIC UTILITIES. Order of the ILLINOIS STATE PUBLIC UTILITIES COMMISSION. Conference Ruling No. 14.

*"It is hereby ordered by the State Public Utilities Commission of Illinois, That any change in 'any rate or other charge or classification or any rule, regulation, practice or contract relating to, or affecting any rate or other charge, classification or service or any privilege or facility' which does not result in any increase of any rate or other charge of any public utility may be made and shall become effective thirty days after a schedule of the same shall have been filed with this Commission and posted in accordance with the terms of Sections 33 and 34 of an act entitled 'An Act to Provide for the Regulation of Public Utilities' approved June 30, 1913, and effective January 1, 1914.*

*"Any such change may be made and become effective within thirty days after the filing of any schedule by any public utility whenever the Commission shall so provide by an order specifying (1) the change or changes to be made and (2) the time when the same shall take effect and (3) the manner in which they shall be filed and published.*

*"Any change made by a public utility in its regular rates, charges and classifications for service since July 1, 1913, whereby the rates, charges or classifications exceed those in effect on said date, are illegal unless the same have been consented to by this Commission and in case any public utility has made a change in any rate, charge or classification whereby the same exceeds the regular rate, charge or classification of such utility in force on July 1, 1913, such public utility is ordered and directed to return to the regular rate, charge or classification (but not to any discriminatory rate, charge or classification) which was in effect on July 1, 1913, and to continue such regular rate, charge and classification in force until this Commission shall have given its consent to increase the same.*

*"When any rate or other charge shall be increased or whenever any classification, contract, practice, rule or regulation shall be so changed as to result in any increase in any rate or other charge, of any public utility, the same shall not become effective until it shall have been adopted by this Commission.*

*"Where any rate, charge or classification of any public utility, in effect on July 1, 1913, is discriminatory, such public utility must forthwith abandon such discriminatory rate, charge or classification and hereafter conform to the provisions of an act entitled 'An Act to Provide for the Regulation of Public Utilities,' approved June 30, 1913, and effective January 1, 1914, and particularly to Sections 37, 38 and 39 of Article IV of said act.*

**224.5—Rates Fixed by Contract.**

"Where any public utility doing business in this State is required by the terms of any franchise ordinance granted to it by a municipality to furnish service to such municipality in consideration of its franchise, such public utility shall observe such franchise requirements until otherwise ordered by this Commission. This Commission reserves the right to inquire into the reasonableness and sufficiency of any such franchise requirement and to disregard the same whenever the rates and charges of any such public utility shall be hereafter considered and determined by this Commission.

*"It is ordered, That this ruling be designated as Conference Ruling No. 14, and that the same be, and it is hereby, substituted for Conference Ruling No. 7 of this Commission, which was approved March 27, 1914, which Conference Ruling No. 7 is hereby repealed."*

**FLORIDA****224.5—Rates Fixed by Contract.**

FREE OR REDUCED RATE TELEPHONE SERVICE TO A MUNICIPALITY IN PURSUANCE OF A FRANCHISE CONTRACT. Opinion of Counsel For the FLORIDA RAILROAD COMMISSIONERS. September 11, 1914.

*"Is it lawful for a telephone company to grant free or reduced service in pursuance of a franchise contract?"*

"Since my opinion dated July 9, 1914, upon the Southern Bell Telephone and Telegraph Company's statement of full and part concessions, the question has been raised by several telephone companies as to the validity of their action in granting free or reduced service to municipalities where the company's franchise as originally granted by a municipality contains a requirement of such free or reduced service to the municipality.

"In my opinion this question is answered by the United States Supreme Court in the *Mottley* case. . . . *L. & N. R. R. Co. v. Mottley* 219, U. S. 467.

"Here the Supreme Court denies the right to issue passes forbidden by a legislative act, even though such passes are provided for by a solemn contract based upon a valuable consideration. What is said by the court in reference to that contract is, so far as I am able to discern, fully applicable to a franchise contract and I must conclude that the allowance of free or reduced service which is forbidden by the act of the legislature cannot be validated by a pre-existing franchise contract.

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"In the *Mottley* case the contention was made that the agreement between Mottley and the railroad company constituted a contract which was inviolable, and manifestly there is much to be said in behalf of that contention. The arguments advanced by the court in overruling that contention would in my opinion logically lead to overruling many opinions of the Supreme Court if strict consistency had to be observed. But I can only accept the law as it is laid down by the Court and to my mind it is clearly against the allowance of free or reduced service based upon franchise contracts."

### **CALIFORNIA**

#### **783—Safety of Service.**

W. S. JUNKIN v. PACIFIC GAS AND ELECTRIC COMPANY. Decision of the CALIFORNIA RAILROAD COMMISSION, November 7, 1914.

The complainant alleges that the defendant company, operating an electric transmission and distribution system, does not properly protect its transmission mains, thereby greatly endangering life and property. After investigation, it was found that although this company has taken considerable steps to safeguard their employees and the public, certain additional steps should be taken to properly protect their high power transmission line. The defendant was given thirty days in which to submit, for the approval of the commission, plans for the installation of additional safety devices.

The Commission's electrical engineer was also directed to fully investigate the matter of physical hazard due to the construction, operation and maintenance of electric lines and apparatus of dangerous potential and to report to the commission the result of such general investigation with a view to requiring all utilities of this nature to comply with such reasonable safety requirements as may be deemed necessary.

### **LOUISIANA**

#### **781—Adequacy.**

VICKSBURG, SHREVEPORT & PACIFIC RAILROAD COMPANY. Application for Authority to Discontinue Certain Trains. Decision of the LOUISIANA RAILROAD COMMISSION, Granting the Application. December 15, 1914.

In granting the application of the railroad company for authority to discontinue certain of its trains, the Commission said:

"It should be borne in mind that during times of great public stress such as at present, every class of business is retrenching, and the corporation managers who are responsible for the proper operation and conduct of the great transportation lines must look to the husbanding of resources, in order that these great developers of our resources shall not go backwards, but shall continue to improve and advance.

"The Commission must consider and act upon all applications for relief from its rules, regulations or orders when changed or altered conditions cause them to be oppressive and, in fairness to all, must grant relief. The public can at all times come to the Commission when train service is inadequate, or the carriers fail to provide that which is necessary. Holding these views, the Commission has carefully considered this application with a realization that the public looks to it for protection against unfairness and also that the carrier is entitled to its full measure of justice." . . .

## REFERENCES

### COURT DECISION REFERENCES.

#### 112—Franchises.

HATFIELD V. PEOPLE'S WATER CO. et al. Decision of the DISTRICT COURT OF APPEAL, FIRST DISTRICT, CALIFORNIA. September 23, 1914, 144 Pacific 300.

The plaintiff appeals from a judgment for defendants in an action to have the franchises and waterworks of the defendant declared forfeited to the City of Oakland. The action is prosecuted by the plaintiff in his capacity as a private citizen; and the gist of his complaint is that he, as a water rate payer in the city of Oakland, was overcharged the sum of \$3.67½ by the defendant Contra Costa Water Company, during a specified six months preceding the commencement of the action.

The plaintiff's right as a water rate payer to institute and maintain the action is rested solely upon the provision of section 7 of the act of March 7, 1881.

"It is the contention of the defendants that the act last referred to is unconstitutional in so far as it purports to confer upon a water rate payer the power to compel a forfeiture of the franchises and works of a water company because of an alleged overcharge. We are of the opinion that the contention is well taken and must be sustained. The legislative act in question, in so far as its forfeiture clause is concerned, is inconsistent with and in contravention of that provision of the Constitution which regulates the establishment of water rates. . . .

"The Constitution, it will be noted, provides that the offending company shall forfeit its franchises and waterworks for public use to the city where the excess rates are collected. Clearly, therefore, only two parties can be said to be interested in the procurement of the forfeiture provided for in the Constitution, viz., the state in the first instance, and secondly, the city where an excess rate may have been collected. Obviously the state is primarily and directly interested because it is the sovereign power from whom the water company derives its charter and franchises (Const. §21, art. 1); and manifestly the city where the excess rate has been collected is also interested because it is by the Constitution expressly made the beneficiary of any forfeiture which may be desired and declared at the behest of the state. . . .

"In other words, the revocation of corporate charters and franchises is a sovereign right which can be exercised only by the state or in its name. . . .

"The judgment appealed from is affirmed."

### 112—Franchises.

**TOWN OF GASSAWAY v. GASSAWAY GAS CO.** Decision of the SUPREME COURT OF APPEALS OF WEST VIRGINIA. October 6, 1914. 83 South-eastern 189.

The defendant company supplying natural gas for light and fuel applied to the municipality for a change in its franchise to provide an increase in rates. The application was denied and the company gave notice it would discontinue the supply of natural gas. The Town applied for and received a temporary, and finally, a permanent injunction restraining the company from discontinuing service, from which decree the company appealed. The court holds:

"A public service corporation can not arbitrarily cease to do that which the public is rightly depending on it to do. It cannot cease its service merely because the municipality which granted the franchise will not accede to its desire to charge a higher rate. The reason assigned by the defendant company for the threatened act, a failure of the gas supply, is by no means sustained by the record. Defendant has shown nothing which in law or equity would excuse it in summarily ceasing the service. It still retains the franchise. As long as it retains the franchise, as long as the obligations directly or impliedly arising therefrom remain, it must render the service it agreed to render by the application for the franchise and the acceptance of the same. . . .

"Though in the answer it was proposed to surrender the franchise, yet no corporate act in that direction was shown. The answer, merely in the name of the defendant corporation by its president and its attorney, not even under the seal of the corporation, could not operate as a surrender of the franchise. That such representatives might file an answer for the corporation must be conceded. But that they may surrender a valuable franchise held by the corporation, without showing that by some proper corporate action they were authorized to do so, cannot be maintained. The answer was absolutely void of a showing that the corporation holding the franchise had given back the same to the public."

### 138—Contracts.

**MACON RY. & LIGHT CO. v. PALACE AMUSEMENT CO.** Decision of the SUPREME COURT OF GEORGIA. September 22, 1914. 83 Southeastern 105.

The following is the syllabus of the court:

"The Palace Amusement Company operated a moving picture theater in the city of Macon. On May 21, 1912, it contracted with the Macon Railway

& Light Company for the electric current for operating its motion picture machine and for lighting the theater. The contract was for the entire electric service for a period of five years from the date of the contract. On May 29, 1913, the Amusement Company made a new contract for electric current with the Georgia Public Service Corporation, and on May 30, notified the Macon Railway & Light Company to discontinue service under its contract on and after June 1, 1913. On June 2d, the wires of the Macon Railway & Light Company were disconnected from its place of business and the wires of the Georgia Public Service Corporation were connected and current supplied by that company. On June 6th, four days after the Georgia Public Service Corporation began furnishing current a petition for injunction was filed, and a restraining order was granted. This order restrained the Amusement Company 'from doing any of the acts complained of in the petition, alleged to be in violation of the contract, and especially from using electric service from any other source than from said petitioners.' The Amusement Company filed its petition, setting up the facts as hereinbefore recited, and praying that the restraining order might be modified so as to permit it to continue to use the current of the Georgia Public Service Corporation pending the hearing. Upon this petition an order was passed requiring that the restraining order be modified 'so as not to interfere with or modify the status as the same existed at the time the order was served.' This modification had the effect of allowing defendant to discontinue the service of the plaintiff company and the connection of its wires, and of permitting the Amusement Company to use the current of electricity furnished by the Georgia Public Service Corporation, which was in effect refusing the injunction. *Held* that, while there was no proof showing any failure upon the plaintiff's part to comply with its contract, the court did not err in refusing the injunction. Under the facts of this case, suit for damages would afford an adequate remedy for a breach of the contract on the part of the defendant.'

#### 244—Rehearings and Appeal.

LOUISVILLE & N. R. Co. et. al. v. UNITED STATES et al. Decision of the DISTRICT COURT, M. D. TENNESSEE, Nashville Div. September 1, 1914. 216 Federal 672.

In this decision the court discusses the right to review orders of the Interstate Commerce Commission and the holding is in part as follows:

"It is true that if, upon the facts found by the Commission, its conclusion therefrom plainly involves an error of law, as where it rests, under the undisputed facts, upon an erroneous construction of the Act to Regulate Commerce, an order made by the Commission based upon such error of law is subject to judicial review. . . .

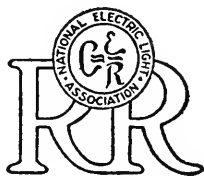
"Obviously, however, this rule does not authorize the court to review, as involving an error of law, the conclusion of the Commission upon a question of fact as to the reasonableness or unreasonableness of a given rate, depending upon a consideration of the weight to be given the various evidential facts found by it. The court cannot review the conclusion of the Commission on questions of fact, or substitute its judgment for that of the Commission upon matters of fact within the Commission's province. . . . And accordingly it is well settled that where all the evidence introduced before the Commission is exhibited to the court, its conclusion of fact that a given rate is reasonable or unreasonable, will be accepted by the court as final and not reviewed upon the weight of the evidence, unless either there is no substantial evidence supporting such conclusion or such conclusion is contrary to the indisputable character of the evidence; in which cases the conclusion involves an error of law and is therefore reviewable by the court."

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# RATE RESEARCH



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**RATE RESEARCH COMMITTEE**  
OF THE  
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120 WEST ADAMS STREET - - - CHICAGO

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# Rate Research

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CONTENTS	Page
Compilation of Rules and Regulations in <i>Re</i> Customer's Deposits . .	227
COMMISSION DECISIONS.....	236
Pennsylvania .....	236
COURT DECISIONS .....	237
New Jersey .....	237
REFERENCES.....	239
Rates .....	239
Public Service Regulation .....	240
General .....	240



# Rate Research

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### COMPILATION OF RULES AND REGULATIONS IN RE CUSTOMER'S DEPOSITS.

#### 580—Terms and Conditions.

The following is a compilation of the holdings of commissions in regard to the practice of public service companies in requiring of customers a guarantee deposit before furnishing service:

#### ARIZONA

(1) In an investigation of the rates of the Tucson Gas Electric Light and Power Company the Commission inquired into the practice of the Company in requiring a guarantee deposit before furnishing gas and electric service, and the decision contains the following discussion of the company's practice:

"Many consumers, or prospective consumers, make application to the respondent for service which must be rendered for approximately one month before payment therefor is demanded, and in some instances, through oversight, negligence or other reasons, certain consumers may not pay for such expense of service. If payment is not secured from consumers, respondent must secure its revenue from other sources, and it is self-evident that the only other source is from paying consumers.

"It appears that the respondent at this time requires such consumers as are not personally known to it, or who are not owners of property in Tucson or vicinity, to make a deposit of \$5.00 for residence service, \$10.00 for stores, and varying amounts for certain other classes of service, such deposits being an estimate of the consumption of such consumers during a period of about two months. Such deposit is deemed fair by this Commission, because if it were not required and the respondent should suffer loss from service unpaid for, such loss would directly react upon the remaining consumers.

The question has been raised as to the reasonableness of requiring the respondent to pay interest to consumers making deposit. This Commission has no opinion in the premises in view of recent legislation, and we must require the respondent to observe the statutes of the State with reference to interest to be paid on consumers' deposits." (I. E. Huffman, Mayor, et al., vs. Tucson Gas, Electric Light and Power Company. Decided July 9, 1913.)

(2) In a decision rendered May 1, 1914, the Commission fixed a schedule of water rates for the Granite Springs Water Company. The schedule provided that the company might demand a consumer's deposit not to exceed \$5.00 for residence service and \$10.00 for business service, 8 per cent. interest to be paid thereon.

(3) The Commission has made the following holding in regard to the requirement of an advance deposit by a telephone company:

"Telephone companies are in the broad sense entitled to advance payment for exchange rental. Such payment shall normally not exceed the next ensuing month's rental.

"Exchange rentals may be collected for three months in advance where extraordinary construction for installation is necessary, or where the credit of the prospective subscriber falls in Class C as provided in Paragraph 3 hereof. (The basis on which extraordinary construction for installation is based shall be as follows: Where for the installation it is necessary to expend the sum of \$35.00 or more for the purpose of completing overhead construction to the point telephone service is desired.)

"A system of credits along the lines here indicated may be adopted by the telephone companies.

"Class A.—Shall consist of corporations and concerns whose book-keeping methods require the auditing of accounts before payment, and Federal, state, county and municipal accounts.

"Class B.—Shall consist of those who in the past have met their obligations to the telephone companies promptly.

"Class C.—Should include those subscribers who have defaulted or failed in the past to meet their legitimate telephone bills and whose telephones have necessarily been disconnected for non-payment of service bills.

"Payments for service from those entitled to Class A credit rating may be delayed for a period not exceeding ninety days from presentation of account. Payments of service from those entitled to Class B credit rating may be required for exchange service in advance or during the current month of the furnishing of such service and for toll service and miscellaneous charges of the previous month. Payment for service from those entitled to Class C credit rate may be required for one month in advance and for toll and miscellaneous charges of the previous month, and where such tolls and miscellaneous charges exceed the sum of \$5.00 in any one month an advance

deposit of this amount may be required after the first month. In extreme cases Class C subscribers who have failed to meet their bills for legitimate toll service rendered theretofore may be refused toll service except upon advance cash payments sufficient to cover the service charges for each individual toll message."

(Application of the Mountain States Telephone and Telegraph Co. Decided October 30, 1913.)

### **CALIFORNIA**

(1) "The applicant asks the Commission also for permission to charge his patrons a deposit of \$5.00, returnable after one year, with interest at 6 per cent., as a guarantee that subscribers will retain service for that period. So many complaints have reached the Commission from the patrons of various utilities in this State with reference to deposits that the Commission will, in the near future, institute proceedings calling into question the reasonableness of this practice, and while not denying the right of public utilities for reasonable protection against possible losses, I deem it advisable to withhold this permission for the present." (Application of O. F. Goodrich. Decided April 28, 1914.)

(2) "As to requiring a deposit, we feel that the need of such deposit should be plain. Anything which adds to the burdens of the patrons of a utility without being of substantial benefit to the utility should, of course, not be required, and any payment which adds to the burdens of the patrons of the utility which the utility has not a plain right to exact, will not by this Commission be approved. We, therefore, reject the application to require a deposit of any sum in the nature of a guarantee, and telephone service shall be rendered upon application and on the signing of the Company's contract, which contract shall be subject to the approval of the City of Pasadena.

"We would suggest, however, that this Company keep a detailed statement as to any losses which may be entailed by reason of its not being allowed to exact a guarantee, and if, at a subsequent date, it appear that these losses are sufficiently large to warrant the imposition of a deposit, we will be disposed to modify this decision and order in this regard." (In re Application of Pacific Tel. and Telg. Co. Decided July 13, 1912.)

(3) "I believe the time has come when this Commission should take a stand with reference to the deposit for telephone service. This practice, as it has been carried on in this State, has always amounted to a discrimination against the poor patrons. The company has at its election required the putting up of a deposit, and the testimony shows that it requires this deposit of those whose financial ability it questions, who are usually those of small means. Such burden put upon the subscriber of small means is absolutely unjustifiable, and the only basis upon which this Commission should even consider

the toleration of the continuance of this practice is that it be made absolutely uniform as to the rich as well as to the poor; the large users of telephone facilities, as well as the small, should be required to put up a deposit which would have a proper relationship to the loss which the company would incur if the telephone is only used for a short time and with the extensive facilities for large users this loss would be greater, and the deposit required should be likewise greater." (City of San Jose vs. Pacific Telephone and Telegraph Company, 1913. California Railroad Commission Reports, Vol. 3, p. 720, 734.)

#### IDAHO

(1) The Pocatello Gas and Power Company applied to the Commission for authority to change its schedule of rates, rules and regulations on less than statutory notice provided by law. One change in the rules required a minimum deposit of \$3.00 per month to be made by all non-property owners as a guarantee to the applicant that its bill for service will be paid. The rule further provided that interest be allowed on such deposit at the rate of 8 per cent. per annum. The Commission held that there was sufficient ground for allowing such change and ordered the changes put in effect. (Application of Pocatello Gas and Power Co. Decided January 24, 1913.)

#### MARYLAND

(1) The Commission approved the following rule of the Havre De Grace Electric Company:

"When the service is discontinued and the apparatus removed because of the non-payment of the bills when due, and the customer thereafter desires to be again connected and served with electric energy, the cost of such removal and re-establishing of the said apparatus shall be at his expense. A deposit double the amount of the probable monthly bill, will be required as a guarantee that all future monthly bills shall be promptly paid." (Havre De Grace vs. Havre De Grace Electric Co. Decided November 28, 1913.)

#### MISSOURI

(1) The Commission investigated the practice of the Scott and Nevada Light, Heat and Power Company as to requiring deposits before furnishing gas, water and electric service and the decision contains the following discussion:

*"The Right to Require Cash Deposit or Personal Security.*—We now come to the question whether a rule requiring a minimum cash deposit in advance as an advance payment or a personal guarantee of the signature of a person known to be responsible wherever the applicant consumer is unknown or known to be irresponsible, is a reasonable and just rule and regulation to be adopted by the public service corporations—such as defendant, who are engaged in serving the public in this State. This question is an important one, as its determination will not only affect defendant, but all public

service corporations of this State which are now engaged in serving the public by furnishing water, gas, electricity, or other public service.

"Wyman on Public Service Corporations, Section 434, states the rule and the reason therefor as follows:

"In respect to many services it will be seen that the rule in its simple form that payment for the service asked must be made in advance is not workable, for it cannot be known in advance how much service will be taken. This is particularly true of measured service, whether gas, water, electricity or telephone—to name four prominent instances of this situation. The happy solution of this problem has been to permit these companies to demand a reasonable deposit in advance to cover expected reply."

"The same writer, after stating that there are but few court decisions as to the reasonableness of the amount of cash deposit to be required reaches this conclusion (Section 344):

"It seems clear that the amount of deposit which may be required is what would ordinarily be sufficient to cover the expected use in the usual period for which bills are rendered."

"The Wisconsin Railroad Commission passed on this question in *Berend vs. Wisconsin Telephone Company*, 4 R. C. Rep. 150, in which the Commission very clearly announces this as the equitable and just rule to permit public service corporations to adopt. (Quoted under Wisconsin No. 1.)

"In the case of *Cedar Rapids Gas Light Company vs. City of Cedar Rapids*, 120 N. W. 1.e. 971, the Supreme Court of Iowa said:

"That such corporations may adopt rules and regulations for the transaction of their business is well settled by authority. *Shepherd vs. Gas Light Company*, 6 Wis. 539, 70 Am. Dec. 479; *Tacoma Hotel Company vs. Tacoma Water Co.*, 3 Wash. St. 316, 28 Pac. 516, 14 L. R. A. 669, 28 Am. St. Rep. 35; *Harbison vs. Knoxville Water Company* (Tenn. Ch.), 53 S. W. 993; *Williams vs. Mutual Gas Company*, 52 Mich. 499, 18 N. W. 236, 50 Am. Rep. 266.

"In each of these cases a rule requiring security or deposit of money in advance was approved. Of course, such rules must be reasonable and not impose an undue burden on the consumer."

"Again in the same case (1.e. 971-2):

"The Company may not base a rule on the theory that the people as a whole are dishonest, but it has the right to adopt a rule, which, while giving the honest citizen what he pays for, will prevent the dishonest from getting that which he will never pay for. See *Harbison vs. Knoxville Water Company*, supra. That the company may establish a rule exacting payment in advance in reasonable amounts, or the deposit of security, at least is fully settled by the authorities, and it would seem that the requirement of security or deposit of money in advance would be quite as effective in enforcing

prompt payments, and more so in avoiding bad debts than an increase in price upon failure to pay by a time stated, and it does not appear that collecting through such method or some other reasonable method that may be devised not obnoxious to the ordinance would entail greater expense on the company than under that of allowing discounts. At any rate, we cannot assume in advance that consumers will not comply with such reasonable rules for the security of the company as may be embodied in their contracts, nor, in the absence of satisfactory proof, that unusual expense will be incurred in collecting the price of the gas sold.'

" 'Again in the more recent case of Phelan vs. Boone Gas Company, 125 N. W. 1c. 209, the same court, again discussing the same question, spoke as follows:

" 'Corporations or persons who undertake to supply a demand which is 'affected with a public interest' are not a law unto themselves, but are required to supply all alike who are alike situated, and are not permitted to discriminate in favor of or against any. By accepting from the city the franchise to lay pipes and mains in the streets and alleys and through them furnish the inhabitants and the public with fuel, illuminating and power gas, the company assumed a public duty. That duty was to supply gas at reasonable rates to all the inhabitants of the city, and to charge each the same price and furnish on the same terms as it did to every other for like service under the same or similar conditions. Haugon vs. Albina Light and Water Company, 21 Or., 411; 28 Pac., 244; 14 L. R. A., 424. Williams vs. Mutual Gas Company, 52 Mich., 499; 18 N. W., 236; 50 Am. Rep., 266. Shepard vs. Milwaukee Gas Light Company, 6 Wis., 539; 70 Am. Dec., 479. Owensboro Gas Company vs. Hildebrand (Ky.), 42 S. W., 351. American Waterworks Company vs. State, 46 Neb., 194; 64 N. W., 711, 30 L. R. A., 447; 50 Am. St. Rep., 610. See Huffinan vs. Telephone Company, 121 N. W., 1033. Such a company may adopt reasonable rules or regulations for the management of its affairs. Cedar Rapids Gas Light Company vs. City of Cedar Rapids, 120 N. W., 966. The evidence disclosed that it has been the custom to exact a money deposit, or the signature of a person known to be responsible, whenever the applicant was unknown, or known to be irresponsible. The delivery of gas necessarily is its consumption. The amount can only be ascertained as consumed. The company is bound to furnish on application, and it is but just that it be not compelled to supply unknown or irresponsible persons therewith without assurance in some form that it will receive compensation. The adoption of a formal rule exacting security seems unnecessary if there is a well established custom, as appears in this case, to exact security as stated. The evidence discloses that this had always been customary with the company. In such a case, the custom has the force of a rule or regulation. Of course, it could not impose different terms according to whim or caprice, but must treat all consumers in like situations alike. As said in the Cedar Rapids Gas Light Case, the

company may not base a rule on the theory that the people as a whole are dishonest, but it has the right to adopt a rule which, while giving the honest citizen what he pays for, will prevent the dishonest from getting that which he will never pay for. Appellee argues that the custom in any event is unreasonable and unjust, in that no definite test is fixed for determining from whom security shall be exacted, all being left to the company's agents. It is unnecessary to pass on this point, for, conceding the validity of the regulation, we agree with the trial court, that it was not resorted to in good faith. Prior to the suit in the justice court, no question had been raised concerning the plaintiff's responsibility. He had paid his bills promptly. Immediately thereafter the company's manager instructed the employes not to reinstate Phelan's meter without security, and on the trial he admitted having no other reason for declaring him slow in his accounts, or irresponsible, than the law suit in which the court adjudicated the company's account had been paid. In retaliation, rather than because of questioning plaintiff's responsibility, the company demanded the security. In the absence of any evidence to the contrary, he is presumed to have been responsible for obligations undertaken, and the district court rightly directed the issuance of the writ of mandamus, as prayed.'

'In the case of *Turner vs. Revere Water Company*, 171 Mass. 1. e. 366, the Supreme Court of that State, speaking of the rule under consideration, said:

'We have also no doubt that a water company may demand a deposit, as is required by the *Boston Gas Light Company*, where it does not know the consumer. This was held to be reasonable in the case of a gas company in *Williams vs. Mutual Gas Company*, 52 Mich. 499. See also *Shepard vs. Milwaukee Gas Light Company*, 6 Wis. 539, and 15 Wis. 318.

'We may say that the law is well settled that a private corporation which procures from a municipal corporation a franchise for supplying the latter and its inhabitants with water, gas, electricity or any other public utility service, and by virtue of which franchise it is permitted to, and does use the streets and alleys of such municipal corporation in the carrying on of its business, becomes thereby affected with a public use and assumes a public duty. That duty is to furnish such water, gas, electricity or any other public utility service at reasonable rates to all the inhabitants of the municipal corporation, and to charge each inhabitant for such water, gas, electricity or other public utility service so furnished, the same price it charges every other inhabitant for the same service under the same or similar conditions. It is plain to every thinking person, and is recognized by both courts and commissions, that if some of the consumers of any public service corporation are permitted to have free service or to be able to defeat the payment of their just bills for such service, that in the long run those who do pay will have to be charged with the losses, sooner

or later, of those who do not pay, by an increase in their respective rates.

"We feel that it will not be a discrimination under the public service law of this State to permit the defendant company to be allowed to exercise its discretion in deciding whether it is necessary to require the deposit or personal guarantee of each and every consumer taking service from the defendant.

"The great weight of authority, and that which seems to be more reasonable to us, is on the side of the question that the public service corporation should be granted such a discretion, and that the exercise of such discretion is not a discrimination within the meaning of the statute leveled against discrimination as to rates and the service rendered by such public service corporation.

"The case of Owensboro Gaslight Company vs. Hildebrand, 19 Ky. L. Rep. 983, lends some color to the view that the rule should be applied to all consumers without any discretion even if known to be absolutely responsible. By a careful reading of this case it hardly bears out that view. Evidence in that case disclosed that no regular rule whatever had been adopted and we think the court had in mind that the public service corporation could not apply one rule to one party that was unknown to it, or that it regarded irresponsible, and a different rule to another person coming within that same class. It might be a detriment to the public to require consumers who are absolutely responsible and known to be so to the public service corporation, to require them to comply with the rule of making a deposit, for if such consumer who is given the option to make the cash deposit or give the personal security, should exercise his choice and make the cash deposit, the defendant company would be required to pay interest on all such cash deposits. And, of course, the interest paid would have to be paid from the earnings of the company and in the long run, become a useless charge on the consumers.

"We feel that the defendant company, as well as all other public service corporations of this state should be given the right and discretion to invoke the so-called deposit rule or personal guarantee.

"It was well said in the case of Williams vs. Mutual Gas Company, 52 Mich. 1. c. 503.

"The duty of the company towards the citizen and that of the citizen towards the company, is somewhat reciprocal, and any rule or regulation or course of dealing between the parties which does not secure the just rights of both, ought not to be adopted, and cannot receive the sanction of the courts."



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"The Commission holds that the rule hereinafter set out is a reasonable rule for defendant company to adopt and therefore directs that the same be adopted as follows:

" 'Defendant company supplying water, gas or electric energy may require a minimum cash deposit or advance payment or a personal guarantee of a responsible person, from each customer it has in the City of Nevada before service is supplied; provided that the consumer shall be given the option to either make the deposit or give the personal guarantee in lieu of such cash deposit; and providing further that the amount so required or guaranteed shall not exceed the estimated monthly bill from such consumer. Interest at the rate of 6 per cent. per annum, payable annually (or upon the return of any deposit covering the item of the deposit), shall be paid by defendant company to its consumers upon every deposit so required. All consumers having heretofore made cash deposit to defendant company shall have the right to withdraw such deposit on demand on his furnishing the personal guarantee for the payment of his monthly bill as herein provided.'

"We feel that this is a fair and just rule to be observed between the defendant and its consumers. With the adoption and enforcement of the above rule giving the option to all customers to give the personal guarantee instead of the cash deposit, and the further right to take down any cash deposit, heretofore made by giving the personal guarantee, such customer will be fully protected even should defendant prove to be insolvent. On the other hand, defendant will have its guarantee that its just bills will be paid from any consumer who is unknown to defendant or who may be regarded as irresponsible. All defendant is entitled to is the payments of its just bills. No obligation is resting on its customers to make defendant their banking institution to hold any money for them.

We feel that the adoption and observance of such a rule will work both to the advantage and harmonious good will of defendant's consumers towards it and the just protection of its financial affairs in the way of personal guarantee or deposit as the consumer may wish. To require defendant to keep such cash deposits as a trust fund and also to require it to pay six per cent. interest thereon, would work both a hardship to it and to the public. We think that the above rule giving the option to the consumer to give the personal guarantee instead of the cash deposit and the right to take down any cash deposit heretofore made, fully protects the interests of each consumer in the premises." (J. J. Cole, et al vs. The Fort Scott & Nevada Light, Heat, Water & Power Co. Decided Nov. 17, 1913.)

(To be continued)

## COMMISSION DECISIONS

## PENNSYLVANIA.

## 840—Public Operation.

Petition of the BOROUGH OF GETTYSBURG For Approval of Construction of Electric Plant For Municipal Lighting Service. Decision of PENNSYLVANIA PUBLIC SERVICE COMMISSION, Holding that its Approval is Not Required and Dismissing Petition for Lack of Jurisdiction. December 4, 1914.

"The Borough of Gettysburg filed a petition praying for a Certificate of Public Convenience evidencing the Commission's approval of the construction and operation by the said Borough of an electric light plant for the purpose of supplying electricity for lighting the streets, alleys, highways, and other public places within the Borough, 'if such a certificate is necessary and required by the Public Service Company law.' A protest was entered by the Gettysburg Light Company and a hearing, at which both the Petitioner and Respondent were represented by counsel, was held on November 4, to determine the preliminary question of the necessity of the Borough to obtain the approval of the Commission before constructing and operating an Electric Light Plant for furnishing electricity to light its streets and not for sale to others. . . .

"It is contended by the Petitioner in this proceeding that the Borough of Gettysburg, as shown by the ordinance enacted on August 26, 1914, a copy of which is attached to the petition, does not intend nor has it the power under said ordinance to furnish electricity to the public, but simply for its own use in lighting the streets and highways, and for this reason comes within the terms of the proviso contained in Section I of Article I of the Public Service Company Law which reads as follows:

" 'That none of the provisions of this Act shall apply to the generation, transmission or distribution of electricity; to the manufacture or distribution of gas; to the furnishing or distribution of water; or to the production, delivery or furnishing of steam, or any other substance for heat or power by a producer who is not otherwise a public service company, for the sole use of such producer, or for the use of tenants of such producer, and not for sale to others.'

"The purpose of this proviso, as so clearly appears from the language used, was to exempt from every and all of the provisions of the Act, a producer, not otherwise a public service company, who furnishes electricity, gas, water, etc., for his own use and not for sale to others. The Borough in this case can not be considered, 'otherwise a Public Service Company' for the reason that in the definition of the term 'Public Service Company' (Sec. 1, Art. I) no mention is made of a municipality.

"The Borough of Gettysburg as well as every other customer of the Gettysburg Light Company has the right, in the absence of a contract, to discontinue the service furnished by the said Light Com-

pany, and to light its streets by means of candles, oil or acetylene gas. No power exists in this Commission to compel the Borough to take the service furnished by the Light Company, nor can it determine where the Borough shall buy the candles, oil, or how obtain the acetylene gas it might desire to use for lighting its streets. We can see no distinction between a municipality generating its own electricity for lighting its streets and making candles or acetylene gas for the same purpose.

"The courts have recognized a clear distinction between the rights under which a municipality furnishes electricity for its own use and where in addition furnishes it to the public. In the first instance it is exercising a governmental function and in the latter is engaged in a business. The purpose of Article III, Section 3 (d) of the act was to prevent a municipality, without first securing the approval of the Commission, from engaging in a business which would compete with a public service company furnishing like service in the municipality, and not to interfere with a truly governmental function of the municipality.

"We are of the opinion that the proviso in Section 1 of Article I of the Public Service Company Law clearly exempts the Borough of Gettysburg in the construction and operation of an electric light plant for supplying electricity, for lighting its streets and not for sale to others from the provisions of Article III, Section 3 (d) of said Act of Assembly. To hold a contrary opinion would mean that no municipality in the State of Pennsylvania, without first securing the approval of the Commission, could install its own stoves or heat plant in its municipal buildings, if a corporation were at the time furnishing heat to the citizens and to the public buildings in the municipality. This certainly was not the intention of the Legislature. "An order will therefore be entered dismissing the petition for lack of jurisdiction."

## **COURT DECISIONS**

### **NEW JERSEY.**

#### **144—Mergers.**

AMERICAN MALT CORPORATION et al. v. BOARD OF PUBLIC UTILITY COMMISSIONERS. Decision of the NEW JERSEY COURT OF ERRORS AND APPEALS, November 16, 1914. 92 Atlantic 362.

The Court of Errors and Appeals affirmed the judgment of the Supreme Court which sustained the holding of the New Jersey Board of Public Utility Commissioners in the decision regarding the merger of the American Malt Corporation with the American Malting Company. The decision of the Board was reviewed in 6 RATE RESEARCH 58. The opinion of the lower court is, in part, as follows:

"If it were necessary to sustain the constitutionality of the act, it would be quite natural to hold that the intent of the Legislature was no more than to require an ascertainment by the Commissioners of the fact that the proposed merger was of a character authorized by law. It is not, however, necessary to go so far as to limit in this way the powers of the Commissioners. The real question is whether

the Legislature itself had the right to impose as a condition of merger the approval of the Commissioners. To state the question is to answer it. The right to merge is purely statutory, and there is no constitutional objection to the Legislature fixing such terms as it chooses, including since that is its pleasure, the written consent of the Commissioners. The Legislature is under no compulsion to authorize a merger, and it may impose even fanciful conditions. . . .

"No doubt the action of the Board must be reasonable and not arbitrary, but that is because we will not attribute to the Legislature an intent to exercise or permit the exercise of arbitrary power. The action of the Commissioners must have a foundation in reason; it has such foundation when it is based upon the requirements of the Corporation Act, or upon settled legal principles, and not upon the mere whim of the Commissioners.

"I doubt myself the view of the Board that the two corporations concerned were not such as could properly merge. The only difference between the kinds of business authorized to be carried on is that the malt corporation is authorized by its charter to buy the stock of the malting company. The merger act does not require that the corporations to be merged carry on the same kind of business; it is enough that the business is of similar nature. How the mere added power to acquire stock can make the two kinds of business dissimilar I do not see. It is not the business in fact carried on, but the business for which the two are organized, that determines under Section 104, the right to merge. It was not the fact that one corporation was a holding company that condemned the merger in *Colgate v. United States Leather Co.*, 75 N. J. Eq., 229, 72 Atl. 126, 19 Ann. Cas. 262. But even this difference between the malting company and the malt corporation is apparent rather than real, since Section 49 (2 C. S. 1910, p. 1630) authorized any corporation organized under the act to purchase stock of other companies, and the Legislature not only re-enacted this in 1913 (Chapter 15), but by express provision recognized the right of one corporation to buy stock of another corporation owning property 'cognate in character and use to the property used or contemplated to be used by the purchasing corporation.' The expression seems to be broader than that contained in Section 104; for corporations may be dissimilar in the kind of business they are organized to carry on, and may yet own property cognate in character and use to that used by the purchasing corporation, and a fortiori to that contemplated to be used. With this broad provision in the act of 1913, the malting company had by statute law the same powers as, perhaps more extensive than, the malt corporation had by its certificate of organization. It is no answer to say that the malting company could not vote on its own stock; neither could the malt corporation; but each could acquire and vote on the stock of the other. Nor is it an answer to say that in fact the malt corporation was only a holding company; the property contemplated to be used by it was the identical property actually owned and used by the malting company; in

fact one object of the merger was to do away with the holding company. If the action of the commissioners rested alone on the ground that the business was not similar under the act of 1896, or cognate in character under the act of 1913, I should have difficulty in sustaining it.

"I think it may safely be sustained on two grounds; (1) That the scheme of merger involves the issue of stock for less than its par value; (2) it is unfair to the preferred stockholders of the malting company.

"(1) Although the malt corporation owns most of the stock of the malting company, and as to that no material change is proposed, it will nevertheless be necessary to issue some stock of the malt corporation for some stock of the malting company, which is worth less than the par value of the stock proposed to be issued therefor. . . .

"It needs no argument to show that the necessary result would be to do away with the provisions of the act requiring money or money's worth. Such cannot have been the legislative intent. I think Section 109 must be read in connection with the rest of the act and that money or money's worth is required for stock issued upon a merger, as well as in other cases.

"(2) I am persuaded also, that the proposed merger is unfair to the preferred stockholders of the malting company for the reasons stated in Mr. Ordway's brief. It is said that the objection on this score is the proper subject for action by the Court of Chancery, and that equity powers cannot be conferred upon the commissioners. I do not regard the case as one where judicial power is conferred upon an administrative body. The Legislature has seen fit to require the approval of the commissioners as a condition precedent to a merger. I see no reason why their refusal to approve may not properly be based upon the fact that the scheme is such that, upon recourse to a proper tribunal, it would be enjoined. Surely it is not for this court to say that their refusal to approve in such a case should be set aside. Their approval would not prevent action by the Court of Chancery. In short, the action of the commissioners is no adjudication of the right of the parties, but a mere step in administrative procedure which is subject to control by the courts."

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### RATES

#### 400—Rate Theory.

THE ART OF RATE MAKING, by ALEX DOW. 1 $\frac{2}{3}$  pages, *Electrical World*, January 2, 1915, p. 17.

With the development of the electric industry and the extension of the use of electricity to many classes of customers, rate making has become an art guided by rules which are shaping themselves into a science. The application of the cost of service and value of service theories; the determination of demand, consumer and energy costs; the classification of the service; rates for the different classes; and the types of rates are discussed briefly, in outlining the principal rules to be followed in rate making.

## PUBLIC SERVICE REGULATION

### 222.1—Form of Accounts.

THE STANDARD CLASSIFICATION OF ACCOUNTS. Adopted by the N. E. L. A. at its Thirty-seventh Convention, held in Philadelphia, June, 1914. 115 pages. \$1.00 per bound copy.

The Revised Classification of Accounts of the National Electric Light Association has been published recently in bound form.

### 226.5—Standards of Service.

LEAD ACETATE TEST FOR HYDROGEN SULPHIDE IN GAS. Technologic Papers of the Bureau of Standards No. 41. August 19, 1914. 46 pages.

The test with lead acetate paper for hydrogen sulphide in gas is discussed and a method for applying the test is recommended. It is stated that at present there is a wide variation in the method of carrying out this test and information is given as to the effect of all the important variables which may affect the results of different tests.

## GENERAL

### 910—Promotion and Growth of Business.

AMERICAN ELECTRICAL INDUSTRIES in 1914, by T. C. MARTIN. 1 page, *Electrical World*, January 2, 1915. p. 3.

The effect of changes in commercial and social conditions upon the growth of the electrical industries is discussed. The growth in urban population and the extension of electrical service to rural districts increase the percentage of electrical consumers to total population. The check which the present war has imposed upon the advance toward restoration of the active and progressive conditions which prevailed up to 1907, is also commented upon, and comparative data are given showing the growth in the electric railway, telephone and electric industries.

### 980—Public Relations.

CONSTRUCTIVE WORK BEFORE THE N. E. L. A., by HOLTON H. SCOTT. 1 page, *Electrical World*, January 2, 1915. p. 5.

One of the most important services which the N. E. L. A. is in position to perform is the giving of information which will bring about a better public understanding of utility problems. In this article, Mr. Scott says, "The public does not know that, notwithstanding the fact that practically everything else has been going up in price and notwithstanding the fact that we are paying more for our raw materials, for labor and for capital, we are literally giving three times as much for a dollar as we were fifteen years ago, to say nothing about the wonderful improvement in service in other ways. The public could not have possibly forced by legislation any reductions in rates which would have been the equivalent of the benefits it has derived from the installation of more efficient energy generating and consuming apparatus. If the electric industry is to grow in the future as rapidly as it has in the past, the public must be taught that central stations are not selling a commodity, they are not selling kilowatt-hours, but they are selling a service. The public, or at least a portion of it, must be made to understand that the passage of drastic legislation and the hampering of the legitimate operations of central stations only makes it harder for the company to finance itself and makes it harder for the company to serve its community properly."

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January 14, 1915

No. 16

# RATE RESEARCH



PUBLISHED BY THE  
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OF THE  
**NATIONAL ELECTRIC LIGHT ASSOCIATION**  
120 WEST ADAMS STREET • • • CHICAGO

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# Rate Research

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CONTENTS	Page
<b>COMMISSION DECISIONS</b> .....	243
New York.....	243
Wisconsin.....	249
Pennsylvania.....	252
<b>RATE AND RATE REGULATION LIBRARY</b> ...	253
Commission Reports and Proceedings.....	253
<b>REFERENCES</b> .....	255
Investment and Return.....	255
Municipalities.....	256
Court Decision References.....	256



# Rate Research

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Vol. 6

CHICAGO, JANUARY 14, 1915

No. 16

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### NEW YORK

#### 300—Investment and Return.

COMPLAINTS V. WESTCHESTER LIGHTING COMPANY, Alleging that the Company's Rates for Gas and Electricity are Unreasonable. Decision of the NEW YORK PUBLIC SERVICE COMMISSION (2D), Adjusting Rates, December 22, 1914.

Complaints involving the reasonableness of the rates for gas and electric service in White Plains, Port Chester, Town of Eastchester, Irvington, Tarrytown and North Tarrytown, were consolidated and the Commission made a general investigation of respondent's rates in the entire district.

The Commission holds that the present returns from the sale of gas in the various districts are low and do not warrant any substantial reduction in rates to these districts. The Commission, however, recommends that a reduction be made. The Company has in effect two gas rates, one for fuel and the other for light, and it is pointed out that it could effect a substantial economy in the elimination of unnecessary duplication of equipment and work by establishing a single rate, furnishing both fuel and lighting-service from the same meter. The Commission says that a net rate of \$1.25 throughout all of the districts would properly be applied by respondent.

"It would be good business policy in our judgment and tend probably to a freer use of respondent's gas if such common gas rate were made effective." . . .

"It is greatly to be regretted that the company's enormous interest charges arising out of securities having little, if any, relation to the actual property account tend to force the company to secure every penny possible in gross earnings, and to limit the margin with which it may be inclined to undertake gas rate reductions which would

place its large business in these districts upon a basis of rates whereby customers would have at least some greater inducement to indulge in much freer use of gas for fuel purposes and also for light."

The respondent's maximum rate for electricity of 15 cents per kilowatt hour is found to be excessive, and the Commission establishes a maximum rate of 12 cents per kilowatt-hour in Tarrytown, White Plains and Port Chester, and further requires respondent to reduce its minimum monthly charge of \$1.00 to 75 cents.

### 311—Basis of Valuation.

The Commission outlined the elements to be considered in making a valuation for rate-making purposes as follows:

"1. The original cost of the property devoted to public use. This includes practically the cost of the plant and system originally, and the net improvements or additions to the property.

"2. The cost to reproduce the property, as constituting the 'present' cost, and for comparison with the original cost.

"3. The company's stock and bonds.

"4. The sum required to meet operating expenses and the probable earning capacity of the property under rates lower than those complained of and in force.

"With these and other matters which may be deemed material, we must arrive at some estimate founded upon sound judgment of the value of the property upon which the company is entitled to ask a fair return. It is also enjoined upon us by the U. S. Supreme Court that no more must be enacted from the public for respondent's benefit than the services rendered by respondent are 'reasonably worth.'

"It should be said at the outset that this whole question of 'valuation' for rate regulation purposes is as yet utterly without definition, beyond the mere statement of the matters which are to be considered. It seems that each rate case has been decided according to facts and circumstances peculiar to such and upon special findings in the trial court or by the particular commission, with no settling of the complex underlying or detailed questions which are involved in the broad question of value to be given to the property of a particular railroad, gas, electric, or other utility." . . .

### 314—Overhead Charges.

The respondent claimed 15% for contractors' profit, 15% for amortization and engineering, 6% for one year as interest during construction, and 20% for various, accrued intangibles. The engineer for the Commission stated that allowances had been made for overhead charges in the unit prices used in the Commission's valuation. In discussing the company's contentions, the decision says:

"No such huge costs are involved. True, something must be added for administration and superintendence and engineering, and some-

thing theoretically at least for organization and development of the business for these districts. Engineering and superintendence with administration cost money; an allowance must be made, and 15 per cent for those services is probably not out of the way. An allowance of 6 per cent covering an average of one year to put all parts of the plant and distribution system in operation is not excessive. It should be repeated that we have no evidence whatsoever in this case as to what contractors would charge to put in place the gas plant and apparatus and distributing system at Tarrytown, taking the job as a whole or separated into important component parts, so that the material could be purchased at wholesale and the whole work done upon a large scale from the standpoint of bidders for the job or jobs. That would have been important evidence to both sides and would have guided the judgment immensely in respect of the various prices. The judgment of the engineer proceeding to estimate reproduction cost is led insensibly to separate unit prices rather than to bulking the items for single orders and to realization of the attractiveness of large purchases to material supply houses and of large jobs to working contractors. In these particular cases we are clearly justified, we think, in limiting these percentage allowances for construction to 15 for administration, superintendence, and engineering, and to 6 for one year for interest during construction." . . .

### 315—Intangibles.

In regard to the allowances for intangibles, the Commission says:

"There are two kinds of intangibles. One class covers all of those items of cost which are necessarily related in one form or another to the construction and putting into operation of the physical property. This includes formation of the company, compliance with state laws in starting such a company, securing of franchises to serve the local territory, obtaining permission and approval for construction of system and exercise of local franchises. In short, under that head may be allowed all of those acts and work which, when accomplished, place the company in a position to begin construction and proceed to operation under governing laws.

"In this first class there is also an intangible expense involved in what is known as securing business for purposes of commencing operation and developing that operation up to the point of general activity in the employment of the constructed system. For example, if a given electric property is to be constructed as a whole and put into operation, customers must be secured, books must be opened, house, store, and factory services including lateral extensions must be arranged for as to methods and design, the inspection service constituted, and a variety of things done attributable to full equipment for the actual business operation. All this comes in a part of the preparation to do business and continues for a certain time until a fair amount of operation is under way.

"The second class of intangibles relates in these valuation cases to

the development of the business up to the point of some profit, either a fair profit upon the actual capital invested or such profit as under the circumstances of the particular case is considered fair for this purpose. It is all very indefinite considered in the abstract, but it is an element to be given reasonable consideration in each case.

"Respondent considers that both of these classes amount to 22 per cent of the tangible property after adding the percentages hereinbefore described. Its theory is that the organization expense amounts properly to about 2 per cent of the tangible property and that the other intangible elements fairly warrant an allowance in addition of 20 per cent.

"The schedules which have been herein analyzed include interest for two years on the land and interest for one year on the constructed improvements. Such interest for that time is paid but once, and if there were to be immediate large returns following in the next year or two years sufficient to cover that expenditure for interest, with fair profit from operation in addition, it might be said with force that such interest cost has been duly returned and must be eliminated from consideration. Or if it could be shown that this had been fully made up in later years with other losses and a fair profit also obtained, the same conclusion might be reached. As a rule, however, this can not be the case, and nothing is shown here to warrant regarding this property in operation as exceptional in that respect. On the other hand, it is clear that these interest payments during a time of non-operation are essential, and that until fully returned to the company they must be regarded as part of the necessary investment. . . .

"If we had before us definitely set forth in the record the full history of these properties, both when in the hands of former companies and while in possession of this company, the cost, year by year, the losses in operation, if any, during years of earlier operation, the actual development from the time each property was put into operation until operating returns exceeded expenses in a material way, and the losses, if any, before the 'going concern' period really arrived, we would have had elements of proof which would guide us in arriving at some definite and proper allowance for intangibles in this peculiar case.

"The time has gone by when commissions and courts can be presumed to accept engineers' percentage estimates of intangible costs without detailed proof as to elements in the particular case which go to make up that percentage. Intangible costs constitute no part of the work of the constructing engineer, and it is as such that the part of the expert engineer testifying in a valuation case can be regarded; for only his qualifications as a constructing engineer give him any standing as a witness in proceedings of this character. Intangible costs are primarily company records. They come in cases like these into the domain of accountancy.

"Neither is it sufficient for a respondent company asserting a percentage estimate for intangibles that such a percentage has been

allowed for intangibles in previous cases in the courts or before certain commissions. To admit that is to say that the whole procedure has been fixed, that this indefinite matter has been definitely settled, that the rules of valuation have been by those precedents wisely prescribed and have exclusive application. All of which is contrary to our knowledge of the complexity and widely variant character of public utility valuation methods and results, and the fact, well understood, that the whole subject of such valuation is still under discussion as to all of its phases by economic associations, by commissions meeting in association, or individually investigating, and by courts to some extent as cases arise.

"In these cases no parts of the elements entering into 'intangibles' for this company have been presented, either in testimony or pointed out as shown in annual reports to the Commission. Respondent makes a guess, and the Commission is left to adopt that, or guess for itself. In acting necessarily as basing its judgment upon its knowledge of respondent's property as a whole and the several parts, the respondent cannot complain of the figures or percentages which the Commission may adopt, having submitted its case with the record containing none of the elements essential to proper computation.

"In this case, where the company is to be regarded as already organized and the question really arises as to what the property in those outlying districts is worth, a small allowance for a proportion of organization, including the cost of franchises, is indicated, and yet in an indefinite matter like this a reasonable liberality applying to a relatively small item is to be applied. We think \$30,000 for Tarrytown, \$10,000 for White Plains, and \$30,000 for Port Chester, divided equally between the gas and electric departments should be sufficient and so hold.

#### **315.4—Franchise Value.**

"We shall not give further value to the franchises. These franchises undoubtedly are property as against other corporations or individuals and they are subject to taxation; but it is impossible to conceive in fairness how, what the people have granted, can be given a rate of return value in itself to be paid for by the people in rates for service performed under the grant. Save where it appears that something has been paid for such franchises, the law forbids capitalization on account thereof, and no such payments appear in this proceeding. The very nature of the franchise is to permit what could not be done otherwise, and it is in broad interpretation a public grant or privilege of value to the grantee but not chargeable in value for service performed thereunder for the grantor. It would be entirely proper for the municipality to provide as a condition in a franchise that no value for such franchise, except as payments are therein required, should ever be applied in a proceeding involving the fixing of rates by governmental authority. It has been; and is

now, considered by us that the inhibition is thoroughly implied. This does not deprive the company of its franchise rights; it simply denies to it the further right to capitalize indirectly that, which under the law, it may not do directly. It is proper to say that respondent has not put in any figures estimating franchise value.

### 315.1—Going Value.

"With all of the property and working capital already supplied what sum would be needed to enable this company if, with the plants and distributing systems already built and connected to the various customers' houses and ready by pushing the button or turning a gas cock to provide light or fuel for those customers, to start upon its established business as completely as in 1909? Here we have no idea of the time necessary to get into full operating swing, or any notion, much less facts, as to losses while developing the business into going concern. Once in partial operation much of this would be charged into operating expenses, but assuming that consideration is not a fair modification, we must make some estimate here as to time and the effect of such time upon the property returned. Here comes in necessarily a fact that is utterly opposed to all of this method of arriving at reproduction. We are asked to imagine a reproduction of the entire plants and systems of these districts in the shortest possible time, and then we are asked to consider the losses occurring from development of the business through necessarily a series of years. The two matters are completely antagonistic. In truth, the plants and systems would not be constructed with services into customers' houses in any short time. Capital would not be so uselessly employed. The business would be established at the most populous centers, and even there at first in the thickly settled portions of the villages, and the growth of the producing plants and distribution systems would be gradual as the business developed, with capital invested from time to time only as required for extensions of plants and distribution service. The theory that the reproduction here called for must be practically instantaneous is imagination run riot. Piecemeal construction, that is as business is developed, whether it costs something more piece by piece or not, is conducted under the most economical methods of superintendence and usually of salaried engineering, and the production of capital required therefor is part by part only as demanded and comes concurrently with the growth of the company's affairs.

"It is the duty of this Commission in these cases to allow a fair sum for the reasonable development of this business from the start of imagined operation to its going concern period, and it is the duty also of this Commission not to so overload the cost of reproduction with such an intangible or overhead cost as will be unjust in anywise to the public concern. The difficulty of deciding this question within these necessary limits without any data indicating such intangible cost is apparent. The only way is to take some arbitrary percentage which is fixed relatively low because of the facts above

stated and discussed. Twenty per cent on this large amount of property is altogether too high. Ten per cent on the gross property, \$421,326.80, may be fair. It may be too low, and it may be still too high. There is this to be said in regard to it. The growth of business during a long period of years involving extensions of the plant and system of a gas or electric company diminishes greatly the ratio of intangibles to physical or tangible property. All properly kept accounts of such companies show this. Since we find 20 per cent of the gross property too high and something lower necessary, we are probably quite as near right in using 10 per cent as we would be in using a lower or higher figure. For the purposes, therefore, of these cases, and in view of the various peculiarities of the cases, we adopt that percentage as the basis for adding on account of intangibles, to the otherwise ascertained property cost." . . .

(Holdings on Depreciation, Rate of Return, etc. will be given in next weeks issue of RATE RESEARCH)

## **WISCONSIN**

### **800—Municipalities.**

Investigation of the Rates and Service of the MUNICIPAL WATER WORKS AND ELECTRIC LIGHTING PLANT IN THE VILLAGE OF WATERLOO. Decision of the WISCONSIN RAILROAD COMMISSION, Fixing Rates. December 30, 1914.

A number of complaints were made regarding rates, service and management of the municipal water and electric utilities of the village of Waterloo, and the Commission on its own motion made a general investigation.

#### **222.3—Method of Keeping Accounts.**

"An examination of the books and accounts of the utility disclosed that the inadequacy and incorrectness of the records were due chiefly to the lack of a scientific accounting system. It was therefore deemed advisable to prescribe an accounting system for the department."

New books and forms were ordered and the new system was installed by a representative of the Commission.

"Under the method used formerly as indicated in the complaint, all collections were made by the secretary of the Water and Light Commission. The statutes require that all collections of the village shall be made by the village treasurer. Also, from the standpoint of scientific accounting methods and sound business management, it is probably not advisable for any business organization either private or public to place the same person who computes the bills in charge of the collections. Accordingly, the accounting system already prescribed provides that collections shall be made by the

village official upon whom the duty devolves according to statutory provisions. A definite system of control and check is thus established."

A large part of the non-operating deficit of the electric plant was shown to be due to an adjustment of stock on hand to the actual inventory figure of July 1, 1914.

"Materials should be sold at a price high enough to cover at least the cost of handling in addition to the cost of the goods. In the cost of handling should be included not only such items as freight and cartage, but also the losses due to breakage, necessary waste, and other costs of a similar nature. If this is done, and if a careful check is kept on the goods sold and on hand, there is no reason why this account should show a deficit at the end of the year. It is in connection with the conduct of this part of the business that much of the criticism of the management of the plant has arisen. Fortunately, there has been a change of persons in charge of the accounts and records of the utility since the petition in this case was filed. This together with the new system of accounts and records we believe will correct this source of complaint."

**352—Expense.**

"For the purpose of rate making in this instance, we here included in the costs interest at the rate of five per cent on \$18,000 in the case of the electric plant and on \$30,500 in the case of the water plant. In order to maintain an equitable relation between taxpayers and consumers, taxes have also been included in the costs at the rate of one per cent on the above figures."

**360—Depreciation.**

"Depreciation as usual has been figured on the cost new which in this instance is taken to be the amounts shown in the property accounts."

**365—Annual Rate of Depreciation.**

"The rates of depreciation used in this instance are five per cent for the electric plant and one per cent for the water plant."

**500—Rate Practice.**

"The present rate for commercial lighting is 12 cents per kilowatt hour for the first 50 kilowatt hours and 10 cents per kilowatt hour for all over 50 kilowatt hours. The manner in which this rate has been applied has made it regressive and hence objectionable. For instance, if a consumer used 50 kilowatt hours he would pay \$6.00, but if he used 51 kilowatt hours he would pay \$5.10. By taking a little more current he would save 90 cents. The rate for power is also regressive. . . .

"In order to correct the discriminatory features of the present system of charges it is necessary to change the type of the schedule. The question of the particular kind of rate schedule that should be adopted was submitted to the members of the village Commission."



A rate similar to the one usually prescribed by the Commission was ordered.

**580—Terms and Conditions.**

"One of the complaints stated in the petition is that some of the electric meters are owned by consumers. In passing on the question of who should own the meters in the Hudson Water Case, 3 W. R. C. R. 138, 141, this Commission says, 'The law clearly contemplates that the divided ownership of parts of the equipment of public utilities shall cease, and that all responsibility for the installation and maintenance of the whole of the equipment shall be centered exclusively in the management. In practice, this undoubtedly means that private and municipal plants must acquire, by purchase or lease, all meters used in connection with their respective works.' Undoubtedly, the best results are obtained when the utility owns the meters, as it can then see that they are properly tested and repaired. It will, therefore, be necessary for the village to take steps to acquire the meters now owned by consumers."

**612—Power.**

"The power rate which we are prescribing is somewhat higher than the old rate. This is particularly true for the plant's largest customer. In making an adjustment in the rate schedule of a utility, increasing the rate to large power consumers is a serious matter, because there is always the likelihood of such customers finding it advantageous to use some other source of power. In the instant case, we have given this matter careful consideration, and we believe that the rate prescribed is low enough to retain the business that the utility now has, and at the same time is high enough to pay the additional costs involved in furnishing the service."

The rates for power are as follows:

**Demand Charge.**

50 cents per month for the first horse power or fraction thereof, and  
50 cents for each additional horse power of connected load, plus an

**Energy Charge of**

7 cents net per kilowatt hour for the first 50 kilowatt hours used  
per month (to)

2 cents net per kilowatt hour for all over 10000 kilowatt hours used  
per month.

These rates are subject to the following limiting rates:

"The maximum rate for power shall not exceed 10 cents per kilowatt hour, nor shall the minimum monthly bill be less than \$1.00 for the first horse power or fraction thereof and 25 cents for each additional horse power of connected load."

**615.1—Limited Hour Service.**

"In establishing a rate for customers who take energy only a short time each year, the same difficulty is encountered as is met with in

making rates for large power users who can readily find some other source of power. If this short time service can be supplied without increasing the capacity of the station or without making any investment other than stringing the regular service wire, it may be a source of considerable profit. In this connection, though, it should be borne in mind that every plant should have some reserve capacity, and that short time business of this nature should not be taken in if it only makes use of this reserve capacity, because if that is done it may become necessary to increase the size of the units in the station at some later time. In other words, this kind of business should come off the daily peak if it is supplied during the winter months, or it should come during the summer time when the daily peak is comparatively small. The operating conditions of each plant must, of course, determine in each instance the proper course to pursue. The reason no new investment should be made for this kind of business, even though it could be had at the regular rates, is at once obvious. The regular rates are based on the assumption that the investment will be used twelve months of the year and there is therefore a larger area, so to speak, over which the fixed charges can be spread. In this case it seems that a straight rate of 12 cents per kilowatt hour would be reasonable both to the customers and to the utility."

**617—Breakdown or Auxiliary Service.**

"In addition to the regular power schedule, it is necessary to fix a rate for emergency service and also one for service furnished to customers who operate only a relatively short time each year. As yet no emergency service is being supplied, but a demand for it may arise in the near future, in which event it will be necessary to have such a rate. The rate usually established for this kind of service is similar to the regular power rate with the exception that the limiting rate does not apply, that is, the rate would be 50 cents per horse-power per month plus the regular charge for whatever energy is used. There seems to be nothing in this case which would make a departure from the usual practice either necessary or advisable. The rate outlined above will accordingly be prescribed for emergency service." [Given above under Power].

**PENNSYLVANIA.**

**300—Investment and Return.**

CITY OF PHILADELPHIA et al. v. THE PHILADELPHIA AND READING RAILWAY COMPANY, et al., Petition for a Reduction in Freight Rates. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, Adjusting Rates, December 12, 1914.

A number of petitions were entered asking that rates on shipments of coal to Philadelphia be reduced. The Commission says:

"This is a case of grave importance, affecting upon the one hand, the cost of a supply of a necessity to the inhabitants of the chief city of the State, and upon the other, the earnings of important lines of transportation which have done much to advance the growth and development of the interests of that City.

"The problem to be solved is, taking all of the facts and circumstances into consideration, to ascertain what will be a fair and a reasonable rate, giving to the railroads a reasonable return on the moneys they have invested and a reasonable compensation for the services they render, and which will not be unduly burdensome upon the consumer, and will not compel him to pay more than his fair proportion of the expenses of the maintenance of the services and of a reasonable return upon the investment. The Commission ought to bear in mind the fact that the maintenance and proper extension of railroad service is essential to the growth, development, welfare and convenience of the people of the Country, and viewing the subject broadly may properly take notice of the fact that within the last few years conditions have been such that these public conveniences, having as a general thing struggled through a profitless period of financial stress and difficulty, and attained success, have not been as prosperous as formerly. Their stock is held by people in all classes in the community who have invested in such securities their savings and accumulations, and these investors are entitled to have their interests fairly treated. It may also be said that no financial operation is likely to thrive which has too much outside direction."

## **RATE AND RATE REGULATION LIBRARY**

The list of books covering rates and rate regulation as applied to electric utilities which was published in 2 RATE RESEARCH 276, is here given, revised and brought up to date. [Begun in 6 RATE RESEARCH 211]

### **COMMISSION REPORTS AND PROCEEDINGS**

(Continued)

#### **OREGON RAILROAD COMMISSION.**

Referendum Vote, November 5, 1912.

##### **Annual Reports.**

Sixth Annual Report, December 15, 1912. (Summaries of Decisions.)

Seventh Annual Report, December 15, 1913. (Decisions, Rules for Overhead and Underground Construction.)

**Uniform Accounts**, Pamphlet giving Classification for Electric, Gas and Water Utilities, effective July 1, 1913.

**Constitutional and Statutory Provisions of the State of Oregon Relating to Railroads and Public Utilities**, compiled and annotated by Clyde B. Aitchison, Chairman for the Commission.

### **PENNSYLVANIA PUBLIC SERVICE COMMISSION.**

July 26, 1913, effective January 1, 1914.

#### **Reports of Decisions.**

Volumes, none yet issued.

Advance Sheets of Decisions issued.

**The Public Service Company Law of Pennsylvania**, digested, topically arranged and indexed by C. La Rue Munson. 1913.

### **RHODE ISLAND PUBLIC UTILITIES COMMISSION.**

April 17, 1912.

#### **Annual Reports.**

First Annual Report for year ending December 31, 1912. (Decisions and Rules of Practice and Procedure.)

### **VERMONT PUBLIC SERVICE COMMISSION.**

January 20, 1909, effective April 1, 1909.

#### **Annual Report.**

Twelfth Biennial Report, June 30, 1908, to June 30, 1910. (Decisions.)

### **WASHINGTON PUBLIC SERVICE COMMISSION.**

March 18, 1911, effective June 8, 1911.

#### **Annual Reports.**

First Annual Report June 8, 1911, to December 31, 1911. Including final report of Railroad Commission, November 1, 1910, to June 8, 1911. (Decisions, Opinions of Attorney General.)

Second Annual Report, January 1, 1912, to November 30, 1912. (Same.)

Third Annual Report, December 1, 1912, to November 30, 1913. (Same.)

### **WEST VIRGINIA PUBLIC SERVICE COMMISSION.**

January 20, 1913, effective April 20, 1913.

#### **Annual Reports.**

None yet issued.

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**WISCONSIN RAILROAD COMMISSION.****Reports of Decisions.**

- Volume I, July 20, 1905, to July 31, 1907.
- Volume II, September 14, 1907, to October 12, 1908.
- Volume III, October 16, 1908, to August 3, 1909.
- Volume IV, August 3, 1909, to March 24, 1910.
- Volume V, March 28, 1910, to November 11, 1910.
- Volume VI, November 11, 1910, to June 14, 1911.
- Volume VII, June 15, 1911, to September 23, 1911.
- Volume VIII, September 27, 1911, to March 12, 1912.
- Volume IX, March 13, 1912, to August 22, 1912.
- Volume X, August 23, 1912, to November 13, 1912.
- Volume XI, November 13, 1912, to May 19, 1913.
- Bound Volumes, \$1.50 per volume
- Advance Sheets issued for each decision.

**Annual Reports.**

- First Annual Report, for year 1907.
- Second Annual Report, for year 1908.
- Third Annual Report, for year 1909.
- Fourth Annual Report, for year 1910.
- Fifth Annual Report, for year 1911.
- Sixth Annual Report, for year 1912.
- Report for the year 1913 is not yet issued in bound form.

**Rates of Public Utilities** issued in pamphlet form.

- Part I, Electric Rates, in force June 1, 1912.
- Part III, Gas Rates, in force October 1, 1911.

(To be continued)

**REFERENCES****INVESTMENT AND RETURN****340—Rate of Return.**

RESULTS OF THE WAR FOR PUBLIC SERVICE COMMISSIONS TO CONSIDER, by HENRY FLOY, 1 page, *Electrical World*, January 2, 1915, p. 15.

The writer concludes that the European war has hastened recognition and appreciation of the following facts: First, rates of return allowed public utilities are

controlled primarily by current demands and rates for money, without regard to regulating or law-making bodies. Second, decisions of commissions made at a specified time under a particular set of conditions may have to be revised promptly when these conditions are changed. Third, the limitation of rates of return to 6, 7 or 8 per cent, as has been held fair by public authorities under past conditions, must be increased under existing and probable future conditions if utilities are to secure the additional capital they require.

## **MUNICIPALITIES**

### **830—Public Ownership.**

THE FAILURE OF GOVERNMENT TELEGRAPH AND TELEPHONE SYSTEMS, by F. G. R. GORDON. Address delivered at the Fifteenth Annual Meeting of the National Civic Federation, December 4, 1914.

Data are submitted to show that wherever the telegraph or telephone has been owned and operated by the Government there is extremely poor service, with large financial losses, low wages for employees, and rates that, on the whole, are fully as high as they are in this country, and in many instances higher.

### **840—Public Operation.**

THE TREND TOWARD GOVERNMENT MANAGEMENT OF BUSINESS, by JEREMIAH W. JENKS. Address delivered at the Fifteenth Annual Meeting of the National Civic Federation, December 4, 1914.

The part governments have taken in the development and operation of railroads, roads, post-office systems and educational systems is briefly reviewed and the tendency toward increasing the field of government management is noted. The writer questions the advisability of encouraging municipal ownership of utilities and government ownership of telephone and telegraph systems.

## **COURT DECISION REFERENCES.**

### **114—Eminent Domain.**

ONEONTA LIGHT & POWER Co. v. SCHWARZENBACK et al. Decision of the NEW YORK SUPREME COURT, APPELLATE DIVISION, THIRD DEPT., November 25, 1914. 150 N. Y. Supp. 76.

In this decision the Court holds that where a corporation had contracted with a city to furnish electric light for the streets and other public places and buildings of the city, to furnish light and power to applicants within the city upon reasonable notice and at a reasonable price, and to provide a duplicate system against emergencies, land overflowed by its dams, maintained for the purpose of carrying out such contract and furnishing such light and power was taken for a "public use." Where the intended use of an improvement, sought to be accomplished through an exercise of the right of eminent domain, is not restricted to private parties or private interests, but is open to the whole public, it is no objection to the act authorizing it that it will benefit one person or class of persons more than others, or that it originated in private interests and was intended in some degree to subserve private purposes. The "necessity" for land sought to be condemned by an electric light and power company which will justify its condemnation need not be an absolute necessity, but only a reasonable necessity of the corporation in the discharge of its duty to the public.

Vol. 6

January 21, 1915

No. 17

# RATE RESEARCH



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**RATE RESEARCH COMMITTEE**  
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**NATIONAL ELECTRIC LIGHT ASSOCIATION**  
120 WEST ADAMS STREET - - - CHICAGO

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# Rate Research

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## CONTENTS

Page

### COMMISSION DECISIONS

New York	259
Wisconsin	263
New York Report to First District Commission	264
Compilation of Rules and Regulations in Re Customer's Deposits	265

### REFERENCES

Rates	270
Investment and Return	271
General	271
Court Decision References	272



# Rate Research

Vol. 6

CHICAGO, JANUARY 21, 1915

No. 17

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible.

## COMMISSION DECISIONS

### NEW YORK

#### 300—Investment and Return.

COMPLAINTS V. WESTCHESTER LIGHTING COMPANY. Alleging that the Company's Rates for Gas and Electricity are Unreasonable. Decision of the New York Public Service Commission, 12, Adjusting Rates, December 22, 1914. Begin in 6 RATE RESEARCH 219.

#### 340—Rate of Return.

The reductions ordered by the Commission will leave to respondent over 8 per cent. upon the estimated property valuation.

#### 380—Depreciation.

The respondent contended that there was no real depreciation in its property so long as it was giving 100% service, but that the replacement of its property must be provided for by a depreciation charge. The complainants argued on the other hand that the company's property is greatly depreciated, and at the same time that respondent's reserve for amortization of its property is high. The Commission calls attention to the conflicting views and discusses the matter as follows:

"There can be no difference in principle or in fact between depreciation of a property in the past, or depreciation of that same property in the future. Whenever a piece of depreciable property is installed or erected, it begins to depreciate. Atmospheric conditions and action of soil play their parts whether the property is used or not used. Use in operation wears the property, and adds to the ordinary repairs. The causes of depreciation are properly summed up in the terms use, misuse, or age. If a piece of machinery is old and of obsolete type, inefficient in operation, and its use makes for relatively high operating expenses, then it is clear that a measure of depreciation has taken place on account of obsolescence. If it

is of limited capacity, or its capacity is outgrown, or if it cannot be operated to advantage with more suitable or later installed apparatus or facilities, then it is chargeable with inadequacy. If it has been used or misused, or if necessary current repairs have been neglected as tend to lessen its value in performance or function, so that it no longer satisfactorily serves, there has been a measure of depreciation seriously affecting its value, and in a short time comparatively its use may be ended, and its salvage return would then represent its only value. A gas plant or electric plant deteriorates and wears out as does all construction made up of machinery, appliances, and various other decaying materials. Every such construction begins to wear its short or lengthy life away the moment it comes into use. Nothing can be more certain or better known, and the statement is so trite, so merely a truism, that the only excuse for it is found in discussing respondent's contention. Each part or class of parts of a gas or electric system has its duration of useful life. The life of a pole is relatively short, the life of a gas main in ordinary soils is relatively long, wire wears off, gas making machinery becomes impaired, and all things, including business necessity, business economy, and business enlargement, conspire to require retirement of existing parts and the substitution of others.

"Now, when the engineer charged with the duty of preparing an inventory and appraisal of a plant undertakes to fix the present physical value, his work is to assign such value to the various parts as relates to their present condition and as relates to their actual future use in that business. Clearly such an engineer would not assign a cost new value to a dilapidated piece of property, or to one which for the use it is designed to have is no longer as good as it ought to be in the elements of economy, or its relation to the business in which it is employed. No man or syndicate would employ a second time the engineer who charged in such a piece of property at the cost for a new production of that property. Is the public to be subjected to any different service by such an engineer when the reason for the appraisal is not for purchase, but for determining what the property is worth as the basis of fixing a return for its use? We say, No! In each case the subject of return from its use is the underlying cause of the appraisal, and whether the appraisal is for a return basis to the purchaser or a return basis to the owner, is immaterial to any proper action of the engineer. If this is true as to a dilapidated piece of property or one greatly worn in service or of lessened consequence in service for the economic ends of the business, the principle so established applies firmly to all distinctly shown actual depreciation.

"It is well recognized that a utility company serving the public is entitled to charge the public for its service such prices as will give it a fair return upon its investment in property actually used and necessary to that service, plus the sum necessary to meet all expenses of operation and to prevent its capital so invested from be-

coming impaired. If by its own acts or its negligence it permits the property, that is to say, its capital, to become impaired, and it uses money from earnings for dividends or other purposes which should have gone or should go into the property for maintenance and duplication necessary from inexorable wear, it has impaired its property investment just as certainly and to the same effect as does the man with an investment drawing interest when he uses part of the principal or makes that principal subject to lien.

"The argument frequently advanced, and urged in this case, that a company like this is required to furnish 100 per cent. of service and is therefor entitled to 100 per cent. of investment value, is correct if the full meaning is given to terms. The investment value is the value of the investment, in this case the property, and what that property is at the given time, not what it was when the property itself was new. Another catch phrase often used is '100 per cent. of efficiency calls for 100 per cent. of return.' Nothing can be more misleading. There are many plants in gas and electric service which have greatly depreciated from the first cost or from what would be the cost of reproduction *new*. Such a plant is in an advanced state of wear. Nevertheless, it is producing gas or electricity and the product reaches the consumer continuously as wanted, *for the present*. But that plant, physically much depreciated from when it was new, is far on its way to the scrap heap. It does violence to simple intelligence to say that plant from a property standpoint, from a purchase standpoint, or the public standpoint, is as good as new. That, however, is just what application of the asserted rule last quoted means. Its application is only altered in degree if it appears that the plant is being maintained for service, but is not like new, because of that general physical depreciation which comes from age, and can only be met by reconstruction as the life or advantageous use of the various parts actually expire. Once the fact of physical depreciation in value to the business use of parts of a plant is understood and recognized, the degree of such actual depreciation of a given plant at a given time is simply a matter of expert examination and conscientious statement.

"The question of valuation in a rate case necessarily includes ascertainment of the present physical condition of the property with reference to its continuance in business use, since if it were not used in that business it would be worth nothing. The question is not to be considered as concluded by a mere showing of present efficiency of service *by the company*, for the question extends to efficiency of service *by the property throughout the remaining years of its life*."

#### **366—Depreciation Funds.**

"If a new company could start a new plant and know exactly how much that plant with its composite parts would, with proper general maintenance, depreciate each year during its previously

accurately ascertained life, its problem would be entirely simple. It could set aside each year from its earnings after paying operating expenses, including the maintenance, enough to cover the depreciation. In other words, to duplicate the plant at the end of the plant's life. Now it would not wait until the plant should be completely worn out. It would of necessity begin the work of reconstruction within a comparatively short period of years and according as parts of the plant demanded such reconstruction or duplication. In such a case, the company would have each year its property fully maintained and cash to cover any remaining depreciation. That would be ideal, and with the knowledge implied it would be practicable and in conformity with the only proper practice. That is the true theory which underlies the creation and yearly increasing of a depreciation reserve. Unfortunately, no one knows just what would be a proper depreciation reserve to be established and augmented to cover the accruing depreciation. If this Commission knew, it could fix the necessary depreciation reserve accounts for the different companies as part of its accounting order requirements, and so save to the public as well as to the companies the continued efficiency of these utilities without impairment of the fixed capital or property investment account. In the case above supposed for any impairment of its fixed capital due to depreciation the company would have its substitute in cash or available assets. Its accounts would stand then, debit, the property new as the investment; credit, the property depreciated, plus the depreciation reserve; and there would be no deficit. That describes the theory underlying the account in the books of companies for general amortization or depreciation.

"This respondent following the business requirement for a depreciation reserve charges the public the amounts per kilowatt-hour of electricity and per thousand cubic feet of gas herein stated. Whether too much or too little we need not for the moment require. In so doing it recognizes, as it must recognize, the impairment of its capital due to depreciation, that is to say, the expiring life of the physical property. The property it operates had depreciated in 1909 from what it would cost new as a whole, and as it stands today it is depreciated much or little just as every property in operation must be, since reconstruction only takes place for parts as necessity or other business reasons may require. Its property if all new would start with a new depreciation reserve. Being composed of plants and systems constructed in parts during a considerable number of years, its depreciation reserve, or renewal and contingent account, was established some years ago, and has now reached a large sum. It needs that sum or some sum to stand in place of the impairment of its capital due to those things which are conveniently included under the head of depreciation. With that sum *and* its present property in one hand it balances the property new account in the other, if they equal. That must be respondent's position. Otherwise for depreciation or amortization, or the con-

tingencies therein involved, it is charging the public too much or too little for that purpose. In so estimating the amount required for its reserve it is not entitled justly to take more from the public from year to year than is necessary to keep pace with the impairment of its capital from year to year, though since it cannot know how much is required it must exercise a careful judgment in estimating the amount. . . .

The respondent's reserve fund is raised by charges of one cent per kilowatt hour for electricity and ten cents per thousand cubic feet for gas.

"This reserve built up on the straight line method has, of course, been largely reinvested by respondent in its property and the reserve is charged against itself in the bookkeeping accounts. Unless it appears that up to the present time the operating charges which make up this reserve constitute an excessive reserve for depreciation we do not think we ought to condemn the method. It is to be admitted that a depreciation charge so arbitrary as a certain stated part of each kilowatt hour electric rate and of each thousand cubic feet of gas rate no matter how close to capacity the sales may run, is not based upon any defined rule relating to depreciation; but the fact is that no such definite rule has yet been devised, and every company today that is observing our depreciation account requirement is using some method more or less arbitrary in character.

"For the present and until it appears that respondent's charges to the public become excessive as being more than is needed for its accrued depreciation, we should not disturb the basis which respondent has adopted. . . ."

#### **540—Minimum Charge.**

The respondent is required to reduce its minimum monthly charge of \$1.00 to \$0.75.

"Some minimum charge should be permitted, but a charge of \$1 per calendar month is too high."

### **WISCONSIN**

#### **300—Investment and Return.**

Application MARION AND NORTHERN TELEPHONE COMPANY for Authority to Increase Rates. Decision of WISCONSIN RAILROAD COMMISSION, Changing Rates. December 31, 1914.

In discussing the valuation of the company's property the decision says:

**315.1—Going Value.**

"In determining a fair value upon which to allow a rate of return, it is only fair to take into consideration an allowance for going value and the fact that the accumulated surplus and reserves have been reinvested in property and plant. With a present value of \$18,504 it seems adequate if a return is allowed on a property value or approximately \$23,000."

**340—Rate of Return.**

A rate of return of 7% was allowed on the above total value.

**580—Terms and Conditions.**

"The policy of collecting rentals monthly in advance is a legitimate practice which the applicant is authorized to continue. For failure to pay rental and tolls within 15 days after due, a penalty of 10 cents per phone will be allowed."

**NEW YORK****REPORT TO FIRST DISTRICT COMMISSION****830—Municipal Ownership.**

RESTRICTION OF MUNICIPAL INDEBTEDNESS IN ITS RELATION TO MUNICIPAL OWNERSHIP, by ROBERT H. WHITTEN, Formerly Librarian-Statistician for the New York Public Service Commission (1st D.)

The report on the restrictions of municipal indebtedness was prepared for the First District Commission but has not been printed in their reports. A study was made of the provisions in state constitutions restricting indebtedness of municipalities in this country and the condition of American cities in this respect was compared with cities in England, where there are no fixed limits to the borrowing powers. The allowed indebtedness is usually a stated percentage varying from 3 to 10 of the assessed valuation of the municipality. The difficulty of finding a way to finance municipal enterprises in view of the fixed debt limits contained in the state constitutions has led American cities to the consideration or trial of a number of devices.

There are six principal means which have been developed, to enable municipal bodies to purchase or build municipal plants, when the capital required would exceed the constitutional debt limit, and each of these is defined, and the workings thereof illustrated by numerous cases of industries carried on under these methods. They are:

1. The complete or partial exemption from the debt limit of bonds issued for public utilities.

Special exceptions are made in the constitutions of thirteen states, of debts for water, gas, electric or other revenue-producing industries.

**2. The security franchise method.**

This plan is to secure the debt solely by a mortgage upon the plant or property for which the debt is incurred. In case of default of interest or principal, the holders of the mortgage may foreclose.

**3. The public utility warrant secured solely by the revenues of the utility.**

In this the debt is secured by the gross earnings or a certain portion thereof, and not by a lien upon the property.

**4. The public trust.**

Under this plan, a public enterprise is placed under the management of a board, which constitutes a separate legal entity (the members being appointed, or elected by the people), which may borrow money on the revenues of the utility, and conduct the affairs in much the same way as the affairs of a private corporation, except that there are no profits.

**5. Exemption of special assessment bonds.**

By this method the total borrowing capacity of the city is enlarged by making special assessments a lien only on the property for which the assessment is levied, for instance, all street improvements, etc., are assessed on the abutting property, or on that specifically benefitted.

**6. The creation of a special taxing district.**

In this plan special districts are created, with boundaries not co-terminus with the municipality subject to the debt-limiting provision, and so enjoying separate taxing powers.

## **COMMISSION DECISIONS**

### **COMPILATION OF RULES AND REGULATIONS IN RE CUSTOMER'S DEPOSITS.**

#### **580—Terms and Conditions.**

The following is a compilation of the holdings of commissions in regard to the practice of public service companies in requiring of customers a guarantee deposit before furnishing service, continued from 6 RATE RESEARCH 227.

#### **NEVADA**

(1) In an Investigation of the Pacific Tel. & Tel. Co. upon the Commission's own motion, the decision says:

"The subject matter of the proceeding is the usage of custom of the respondent company, requiring a deposit of \$5.00 upon the installation of a telephone. Such charge, upon its face, appears to be a rather small matter; but it must be borne in mind that when the charge is made to a great many people, it becomes a subject of very considerable importance. It is not going too far to say that probably no one thing connected with the service of the telephone company has given rise to more complaint than the installation charge mentioned. \* \* \*

"We believe that if the company be allowed to charge for two months in advance at the time of installing the telephone, and thereafter to collect for one month in advance, it will be fairly and reasonably protected. Such a course will do away with the discrimination complained of, and remove much of the friction and ill-feeling which is engendered by the exacting of the five-dollar deposit. It is the view of this Commission that the custom of charging a deposit of \$5.00 upon the installation of a telephone should be discontinued, and that in lieu thereof, the respondent company should be permitted to charge for two months' service in advance as a condition precedent to the installation of the telephone, and that thereafter, one month's advance payment may be at all times required." (Railroad Commission v. The Pacific Tel. & Tel. Co. Decided February 21, 1914.)

### NEW JERSEY

(1) The Coast Gas Company discontinued service to a patron on August 15th, 1912, for the reason that the complainant had failed to pay a bill rendered by the Company for gas consumed in 1910. The Company had continued service and had not taken any action to recover the overcharge during the two years that had elapsed. The Commission says:

"This failure on the part of the company to take action estops them from shutting off service at this late day, on the ground that such discontinuance is necessary to force payment of a bill long in arrears and as long in dispute. The company still has a remedy in the courts. \* \* \*

"The question emerges whether under the principle herein enunciated gas companies are not left exposed to any unscrupulous customer who may trump up a dispute to evade immediate payment of bills due, and then decamp to other jurisdictions before the dispute can be determined. The respondent alleged that this danger is a real danger in seaside resorts, with their large non-resident summer population. To this query the answer seems sufficient, that a reasonable deposit in advance (with interest thereon allowed the depositor) seems to furnish good guarantee against losses such as might result in the circumstances indicated. Where gas companies do not require a deposit, the reasonably prompt payment of admittedly due bills for gas may be enforced by a prompt cessation to furnish service.



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But the payment of back bills bona fide in dispute, where the company by subsequent furnishing of service has admitted the legitimacy of a difference of opinion as to the bill in question, cannot be enforced by shutting off service." (Thomas J. Murphy vs. The Coast Gas Co. Decided September 20, 1912.)

(2) In an investigation of the rules of the Easton Gas Works and the Eastern Pennsylvania Power Company of New Jersey exacting a deposit in advance of supplying service, the Commission held that, to offset its peculiar legal obligation to afford service to all who apply and to protect itself from bad debts which might otherwise be unavoidable, a public utility may reasonably require of prospective consumers advance deposits to secure the payment of bills for service to be rendered, provided, that the deposits exacted are not excessive or exorbitant, are not unduly or unjustly discriminatory, and, in the aggregate, and to the extent not used to liquidate consumers' bills justly due, are treated as a quasi-trust fund.

"The practice of requiring new consumers to make advance deposits and, at the same time, exempting old consumers not in arrears from such a requirement is not unduly or unjustly discriminatory but 'the issue may fairly be raised, however, whether, after adequate demonstration on the part of the consumer of his financial reliability, a public utility avowedly according credit to reliable consumers may not be justly required to refund an advance deposit or apply the same in liquidation of bills due.'"

(In the Matter of an Investigation of the Rules of the Easton Gas Works and the Eastern Pennsylvania Power Co. of New Jersey. Decided February 20, 1914.)

(3). A complaint against the Public Service Gas Company involved the reasonableness of the practice of the respondent company in discontinuing service to a customer, who has failed to pay a bill for gas within the time limited by the company's rule, when said customer has a deposit with the company, amounting to more than the unpaid bill. The Commission discussed the question as follows:

"No question is raised as to the reasonableness of the rule requiring the deposit, nor as to the amount of such deposit. The sole question raised is as to the reasonableness of the practice of the company in discontinuing service when the deposit is more than sufficient to pay all outstanding charges.

"To determine this question it is necessary to inquire into the nature of the deposit and the reasons which justify its exaction. These are discussed in the case decided by the Board in February, 1914, involving the reasonableness of the rule of the Easton Gas Works, requiring deposits. In that case, the Board said:

'In determining the reasonableness of the impugned rule, it is necessary to distinguish the advance deposit required by such a rule from a minimum charge, a service charge, a meter rent, an insurance fund to insure the integrity of the meter, and the base rate for metered gas or electric current. The sole function of the advance deposit

is to insure the payment of service whose amount cannot be known in advance.'

"The fund is held to answer the default of the consumer, and whenever the consumer defaults in payment the fund may be resorted to. Its exaction cannot be justified on any other ground. Persons with credit and financial standing are not required to make a deposit. If the fund could be regarded otherwise than as answerable for the default of the consumer, it would be necessary for the company to reduce its claim to judgment and levy on the fund. Clearly the fund occupies no such position. It is a sum of money in the company's hands, which is answerable for the payment of the consumer's account, whenever there is default in the payment thereof in the ordinary course. In this view, the company should have applied so much of that fund as was required to cancel complainant's charge for gas consumed.

"In this situation, with complainant's debt extinguished, is one day's notice of a purpose to discontinue service reasonable?

"We think not. The company is not required to furnish gas at a risk of loss from non-payment. Whenever it becomes necessary to have recourse to the guarantee deposit the company is justified in regarding the consumer as of doubtful responsibility and in protecting itself from the danger of future non-payment. But while it still has in hand more money of the customer than is required to meet current accounts, summary discontinuance of service is not warranted. In the judgment of the Board, the company would be warranted in giving notice to the customer to restore the deposit to the original amount within a reasonable time or, in case of failure to so renew the deposit, that the account would be closed and the deposit returned, after deducting all service charges to that date.

"The company urged that transferring so much of the fund as would satisfy debts due, would entail increased bookkeeping. This is undoubtedly true. It must not be overlooked, however, that the company is debtor to the consumer to the amount of the deposit and that its possession renders the company's account secure, and such bookkeeping as is entailed is required by the business of the company." (*In re Charles Reineke v. Pub. Serv. Gas Co.* Decided April 20, 1914.)

### NEW YORK

Section 63 of the Transportation Corporations Law of New York, reads as follows:

SEC. 63. DEPOSIT OF MONEY MAY BE REQUIRED. Every gas light and electric light corporation may require every person to whom such corporation shall supply gas or electric light for lighting any building, room or premises to deposit with such corporation a reasonable sum of money according to the number and size of lights used or required, or proposed to be used, for two calendar months, by such person, and the quantity of gas and electric light necessary

to supply the same, as security for the payment of the gas and electric light rent or compensation for gas consumed, or rent of pipe or wire and fixtures, to become due to the corporation, but every corporation, shall allow and pay to every such depositor legal interest on the sum deposited for the time his deposit shall remain with the corporation.

### **NEW YORK—SECOND DISTRICT**

(1). In discussing the proper allowance for working capital in the Buffalo Gas Company case the Commission says:

"In this connection it should be observed that the balance sheet of the Company for the year ended December 31, 1911, discloses that it then had consumers' deposits to the amount of \$78,390.57. This is not held separate and apart as a trust fund, but it represented somewhere in its floating capital, so that very clearly it has a working capital to the amount of these deposits. It is true that it is liable for interest upon these deposits, but that interest when paid is necessarily charged to operating expenses, so that to all practical intents and purposes it has this amount of working capital on hand."

(Buffalo Gas. Co. v. City of Buffalo, 1913, Vol. III P. S. C. Rept. [2d D.] p. 553, 623.)

### **OKLAHOMA**

(1). A complaint was entered against the rules and regulations of the Cushing Gas Company. The Commission says:

"Concerning the requirement of the gas company of a deposit of \$5.00 upon application of the consumer for a meter to be installed, the courts held that the company may require a patron to deposit a sufficient sum to cover the cost of the product or time to be consumed, in advance, and the company has a right to retain such deposit until the product or time consumed has been paid for." (Rushville Co-operative Telephone Company vs. Irvin, 27 Ind. app. 62.)

"In the complaint of McAlester Publishing Company vs. Choctaw Railway and Lighting Company, Corporation Commission of Oklahoma, Cause No. 1498, Order No. 545, the Commission held speaking of the Lighting Company:

"That when they deem it necessary to require security for their current or electricity they may demand a deposit in cash or a bond at the convenience of the depositor, not to exceed the average amount for current or electricity used the previous month."

"In the above case the lighting company required all consumers to put [up] a cash deposit of \$5.00 to \$10.00 before service was rendered. The company is entitled to reasonable assurance in some form that the consumers will pay for the gas consumed, and to require each consumer to deposit an amount of \$5.00 upon application for a

meter, same to remain in the hands of the gas company, is not an unreasonable requirement and therefore will not be interfered with.

"The complainant contends that consumers should be allowed interest on the deposits thus made. The Commission is of the opinion that this is not an unreasonable contention; the gas company has the use of the consumer's money with no restriction as to what use shall be made of same and, in view of this fact, the consumer is entitled to interest and the company will be required to pay such. . . .

"It is therefore, ordered,

"That the Cushing Gas Company shall pay interest on all cash deposits made by consumers at the rate of 8 per cent. per annum, such interest to be payable annually, or for such time as the consumer shall remain connected; that at the time the consumer makes his deposit he shall receive from the gas company a printed receipt, which receipt shall show on its face that the holder thereof shall receive interest on the amount deposited at the rate of interest above mentioned.

"It is further ordered, That the gas company shall, on the day this order becomes effective, issue new receipts to all consumers now connected, bearing the inscription above outlined."

(J. H. Bellis et al. v. Cushing Gas Company. Decided June 21, 1913.)

(To be continued)

## REFERENCES

### RATES

#### 400—Rate Theory.

ELECTRIC RATES, by PERCIVAL ROBERT MOSES: 8½ pages. *The Isolated Plant*. January, 1915. Page 10.

In answer to questions asked by the Uniform Electric Rate Association, the writer analyzes the elements entering into the cost of electric service and states the following conclusions: (1) There should be no difference in the rates charged for residence use and in the rates charged for business purposes. (2) There should be no difference between users of electricity for power and users of electricity for lighting, assuming that these uses are at the same periods. (3) Maximum justifiable difference in rates between the users of electricity for a short period per day and those for a long period per day is limited to one-half the total annual charge for interest, taxes and amortization, divided by the kilowatt-hours supplied during a five-hundred hour peak load period (four hours a day for one hundred twenty-five days). This differential in an assumed case amounts to 2½ cents per kilowatt-hour between a twenty-hour user off the peak and a one-hour user on the peak. (4) There should be no difference in rates because of quantity used. (5) In answer to the question, "What is a uniform rate, assuming that by Uniform Rate is meant

one in which the return from each classification of consumers will contribute, in addition to cost of serving it, the same proportion to profit, fixed and overhead expenses as every other classification?"', the writer says, "A compound rate made up of—

- (A) Peak load demand charge,
- (B) Consumption charge,

peak load being based on unbiased determination of actual demand made by each classification of consumers on the station during peak load period. For all usual classifications—such as residence, commercial, light and power—a flat rate to all except long hour off-peak users would be substantially fair, as the differences in cost of supply would not be sufficient to amount to inequitable treatment."

## INVESTMENT AND RETURN

### 300—Investment and Return.

Brief for the Respondent in the Case of the **COMMERCIAL CLUB OF CHARLESTON ET AL. V. MISSOURI PUBLIC UTILITIES COMPANY**, before the **MISSOURI PUBLIC SERVICE COMMISSION**.

The brief written by I. R. Kelso, Attorney for the Missouri Public Utilities Company, has been filed in the Charleston case before the Missouri Public Service Commission.

## GENERAL

### 113—Financing.

**THE MODERN GAS COMPANY AS A SECURITY FOR BONDS**, by **RUFUS C. DAWES**. 2 pages, *The Gas Age*. Page 75.

The writer concludes that as a basis for bonds, the modern gas company offers "a stable income from the supply of a public necessity, an increasing income, physical property exceptionally high with relation to income and permanently devoted to public service, moderate, and not extortionate profits, a long record, excelled by none, and a present condition of growth never before experienced.

### 900—General.

**SUBWAYS FOR PUBLIC-UTILITY PIPES AND WIRES IN CHICAGO STREETS**. 1 $\frac{1}{4}$  pages. *Engineering News*, January 14, 1915. Page 60.

An abstract is given of a report on the subject of improved means for accommodating the public-utility pipes, conduits, wires, etc., in the downtown district of Chicago. The report was submitted by Alvord & Burdick, consulting engineers of Chicago, to the Special Commission on Downtown Municipal Improvements. This Commission is composed of aldermen and representatives of the Association of Commerce. Louis A. Dumond is Secretary and Engineer of the Commission. The conclusion of the report is that further study and investigation are necessary before any definite plans can be adopted. The report says, "as an economic proposition, the saving to the utilities by the use of subways, plus the value of the subways to the public in relieving present inconvenience, must be sufficient to pay the fixed charges and maintenance on a system of subways, plus the cost of placing the utilities' property in the subways."

## COURT DECISION REFERENCES.

### 114—Eminent Domain.

HAYS v. WALNUT CREEK OIL Co. et al. Decision of the WEST VIRGINIA SUPREME COURT OF APPEALS, December 8, 1914. 83 South-eastern, 900.

In this decision the court makes the following holdings in regard to the right of eminent domain:

"Eminent domain being an attribute of sovereignty, unlimited by the Constitution, it cannot be controverted that the State, through its legislature, in the exercise of its high prerogative, may take or authorize a public service corporation to take, any estate in land dictated by its sovereign will. The only constitutional limitation on the power is that private property shall not be taken or damaged for public use without just compensation, and when taken by a corporation for internal improvement not until just compensation has been paid or secured to be paid. . . .

"Whether the granting of such an estate in fee simple absolute to a railway company or other public service corporation is good public policy, is a legislative, not a judicial question, and one with which the courts have nothing to do."

### 114—Eminent Domain.

CAROLINA & Y. R. R. Co. v. ARMFIELD et al. Decision of the NORTH CAROLINA SUPREME COURT, December 23, 1914. 83 Southeastern, 809.

In a proceeding which sought to determine proper compensation for certain property in condemnation of a railroad right of way the court held:

"It is the recognized rule in this state that, in awarding compensation on condemnation of a railroad right of way, recovery may be had for the impaired value of the property by reason of the easement acquired; this, as a rule, to include the market value of the land actually taken or covered by the right of way and the 'damages done to the remainder of the tract or portions of the land used by the owner as one tract, deducting from the estimate the pecuniary benefits or advantages which are special or peculiar to the tract in question, but not those which are shared by him in common with other owners of land of like kind in the same vicinity.'"

In ascertaining the market value as a basis of estimation the court quotes Lewis on Eminent Domain (3d Ed.) section 706, formerly section 478, in which the following definition is given:

"The 'market value' of property is the price which it will bring when it is offered for sale by one who desires but is not obliged to sell it, and is bought by one who is under no necessity of having it."

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
<b>COMMISSION DECISIONS</b>		275
Maryland		275
New Jersey		277
Manila		278
Oregon		279
New York		279
<b>ANNUAL REPORTS</b>		282
Indiana		282
Washington		285
New Jersey		285
<b>COURT DECISIONS</b>		286
Michigan		286
<b>REFERENCES</b>		287
Rates		287
Investment and Return		288
General		288



# Rate Research

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Vol. 6

CHICAGO, JANUARY 28, 1915

No. 18

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### MARYLAND

#### 450—Value of Service Theory.

JOHN E. POTE, et al. vs. BROOKLYN AND CURTIS BAY LIGHT AND WATER COMPANY, Alleging that Proposed Water Rates Are Excessive. Decision of the MARYLAND PUBLIC SERVICE COMMISSION, Fixing Rates. January 5, 1915.

The Commission is asked to determine the reasonableness of the company's proposed rates for water service in Brooklyn, Anne Arundel County. The Commission discusses the considerations which should govern the determination of proper rates as follows:

"Preliminary to the examination of the evidence, it may be well to lay down the principle of law applicable to the situation. Counsel for the complainants, in his carefully prepared brief, states the legal issue in the following words:

"The Complainants contend that the right of the corporation to earn a fair return upon its investment is qualified by the proviso that in no event shall the company be permitted to charge the consumer more than the service is reasonably worth to them."

"The soundness of the principle contended for by the complainants is sustained by citations from text books of acknowledged authority, decisions of the Court of Appeals of Maryland and decisions of the Supreme Court of the United States.

"The attorney for the respondent concedes the correctness of this law while denying that the facts of the pending case make it applicable against the rates proposed. It is needless to add that we concur in the correctness of the principle of law which must guide us to our conclusion. . . .

"With reference to the reasonableness of these rates we must concede that when compared to the rates established by other water companies doing business under similar or nearly similar circumstances, they seem fair and moderate, nor do they seem excessive when a comparison is made between the gross revenues and the operating expenses. It must be admitted, too, that the financial condition of the Company is not strong, and that no dividends on its stock has been declared or paid for six or seven years. If we should accept the estimates of the Company as to the expenses and revenues of the future there would be a small margin of profit at the proposed figures, making possible only a low dividend.

"But there is another side to be considered. Brooklyn is a town of four or five hundred houses, and it was proved at the hearing, as alleged in the petition, that its worthy inhabitants are mostly manual laborers earning small salaries, and that the dwellings there, for the most part, are blocked together and are only about 14 feet in width. It is stated that the wages of a majority of these citizens would average from \$1.50 to \$1.75 per day and the rental paid by them for houses varied from \$8.00 to \$12.00 per month. It was the opinion of a number of witnesses that these people could not afford to take water at these proposed rates and \$8.00 was named by some of the witnesses testifying for the complainants, and \$10.00 by one of them, as a rate that the people could afford to pay and at which they would take water. We must conclude that the residents there, who at present are drawing water from private or public pumps, desire the convenience which is enjoyed by people of all progressive communities in having water ready at hand in their own dwellings. A previous case by the residents before this Commission in which it was sought to compel the respondent to extend its mains to their town, proves this, unless we should question the sincerity of the application then made, and that we have no disposition to do. The question then comes back, what is a fair rate—fair to the respondent company and to the complaining citizens? We do not feel it essential, in order to answer that query, to enter into a detailed analysis of the value of the property now devoted by the Company to the public service."

**317—Construction in Advance of Present Needs.**

"Suffice it to say that we think the sum of \$150,000.00, upon which this estimate of a proper return is based, is too high, especially when we consider that in the construction of its plant to Brooklyn the respondent provided a plant sufficiently large not only to take care of the present prospective customers in that territory, but also all customers that might be added by the future development and improvement of the property in and around Brooklyn for a number of years to come. In doing this, the apparatus at its pumping station was materially enlarged, and its mains were run through certain sections in Brooklyn where the property is unimproved, but which the defendant hoped would be improved in the future. This addi-

tional outlay the defendant preferred to make, and perhaps wisely so, rather than increase the capacity of the plant as new demands were made upon it, but certainly the present users can not be expected to pay a rate sufficiently high to yield a fair return on the money invested in excess of the amount necessary to properly provide for the present consumption. If the Company elects to make this outlay now, rather than wait until there is a demand for it, then the Company, and not the users should stand the interest on this amount."

### **NEW JERSEY**

#### **615.2—Development Rates.**

Complaint of Moving Picture Establishments Against the PUBLIC SERVICE ELECTRIC COMPANY, Protesting Against the Proposed Charge Which Would Classify Service For Operation of Moving Picture Establishments Under Lighting Rates. Decision of the NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS, Prescribing New Rates For Such Service. November 24, 1914.

The complaint was brought by proprietors of moving picture establishments in Paterson protesting against a proposed change in the rate charged them for electric service for operation of moving picture establishments. This service had been charged for at power rates, but the company contends that the service required by the moving picture establishments very largely coincides in point of time with the service required for lighting, and contends that the lighting rate is properly applicable to this class of service. The Board says:

"The actual net rate for any class of service will depend upon two things: (a) To what extent does a given class of service affect the peak load on the plant and distribution system? And (b) what is the load factor of the particular class of service?"

"Answering the first of these questions, where a given class of service affects the peak at all, the full demand charge must be included in the actual charge made for service. Answering the second question, it will be seen that the higher the load factor, or, in other words, the greater number of hours' use of the demand, the lower will be the final net charge per unit of energy supplied."

The Board concludes that this class of service falls somewhat between the lighting and the power and that a special schedule is justifiable. The company was ordered to put into effect for the supply of current for moving picture arcs, whether supplied directly from the mains of said company or through motor generator sets, the following schedule, effective December 17, 1914:

#### **Rate.**

10 cents per kilowatt-hour for the consumption in each month up to and including an amount equal to 75 kilowatt-hours per horse-power of connected load;

5 cents per kilowatt-hour for all excess consumption in such month.

#### **Minimum Charge.**

\$1.00 per month per horse-power of connected load.

**MANILA****500—Rate Practice.**

MRS. E. MOFFAT V. MANILA ELECTRIC RAILROAD AND LIGHT COMPANY, Requesting That Service Rendered to Separately Metered Premises Belonging to Complainant Be Billed As Though Rendered Through One Meter. Decision of the MANILA BOARD OF PUBLIC UTILITY COMMISSIONERS, Dismissing the Complaint. December 3, 1914.

**530—Terms and Conditions.**

The Commission upheld the practice of the Manila Electric Railroad and Light Company in refusing to collect in one monthly bill charges for electric current rendered to one consumer, but measured by several meters, located on separate properties belonging to the consumer. The decision says:

“Subscription to measured-current service is optional with the consumer, who is really benefited by it, because he is thus enabled to economize on the electric current and it would be unreasonable to prevent the company from treating each meter measuring the electric current of an electric light installation as a consumer, seeing that the meter is placed for the convenience and benefit of the consumer and that the company would then be deprived of the minimum monthly charge, authorized as a just compensation for the gratuitous installation and use of the meter. . . .

“The fact that the four houses mentioned are in a group and serve the same purpose, i. e. the hotel business is no reason why the several light installations, each with its respective meter, in the said houses should be considered as one consumer for the purposes of the contract, and consequently also for those of the greater discount and exemption from the minimum monthly charge per meter, because if said installations were so considered, it would constitute an unreasonable discrimination or preference in favor of the complainant, Mrs. Moffat, in charging for the service rendered, as the charge would be the same as in the case of a consumer having only one meter for measuring the current consumed by him. Moreover, it would give rise to combinations, difficult to avoid, on the part of the consumers and to the detriment of the Company, for the purpose of securing from the latter the largest accumulative discount possible in their respective electric light bills. . . .

“We may cite here the case of the City of Newark, in the State of New Jersey, United States, against two companies, one an electric light and the other a gas company, which case was decided by the Board of Public Utility Commissioners of the state mentioned, because, although the case is not identically the same as the one under consideration, yet the principle established can be applied here. Upon deciding said case, the Board said:

“The contention that the consumption of gas and electricity in all public buildings in the city of Newark should be treated as if furnished

at one separate installation, thus enabling the city to get the benefit of a larger discount is, in the opinion of the Board, unreasonable, and if granted would be in fact a discrimination in its favor unless the same rule applied to all owners of more than one piece of segregated property.'

(City of Newark vs. Public Service Co., 77, Rep., Board of P. U. Com., Vol. 1, p. 413.)

"The Board therefore understands that the complaint filed by Mrs. Moffat can not be sustained, and the same is therefore dismissed."

#### **540—Minimum Charge.**

The Board, in the above finding, holds that a minimum monthly charge may be exacted as a just compensation for the installation and use of a meter. The company has in effect a minimum charge of two pesos (P2.00) or \$1.00 per meter per month.

### **OREGON**

#### **614—Heating and Cooking.**

HUBBARD CREAMERY COMPANY et al vs. MALALLA ELECTRIC COMPANY, Alleging That the Charge for Domestic Heating Appliances and Small Motors is Unreasonable. Decision of the OREGON RAILROAD COMMISSION, Ordering The Company to Modify Its Practice in Charging For Such Service. January 11, 1915.

It is the practice of the defendant company, in cases where small motors and domestic heating appliances are used on the premises of the consumer using its product under the schedule for lighting purposes, to charge regular power rates for current consumed by such small motors and appliances. The Commission says:

"It is customary, and a reasonable practice, to permit consumers under business or residence lighting schedule to install domestic heating appliances and small motors, not exceeding two kilowatts total connected load, as a part of their regular installation, and without requiring a separate meter and monthly minimum therefor. In so far as the practice of the defendant does not permit this to be done, it is unjust and unreasonable."

### **NEW YORK**

#### **132—Protection from Competition.**

Petition of the MECHANICVILLE ELECTRIC LIGHT AND GAS COMPANY, For Permission To Exercise Franchise in the Town of Schaghticoke, Rensselaer County, at Hemstreet Park. Decision of the NEW YORK PUBLIC SERVICE COMMISSION (Second District), Granting the Application. December 15, 1914.

The petitioner asks for authority to exercise a franchise received from the Town Board of Schaghticoke authorizing it to furnish street lighting service in Hemstreet Park under a five year contract. The petition is opposed by the Halfmoon Light, Heat and Power Company,

which company is supplying electricity to private consumers in Hemstreet Park. The latter company has not furnished any street lighting service in Hemstreet Park, but was an unsuccessful competitor against the Mechanicville Company for the street lighting contract. The bid of the Halfmoon company, rejected by the Town Board of Schaghticoke, was for something over \$12 per light, as against the Mechanicville company's bid of \$9.90 per light, which was accepted. The Halfmoon Company based its objection to the granting of the Mechanicville company's application upon the grounds that the latter company gives very bad service elsewhere and that it will never be able, except with ruinous consequences to itself, to carry out its street lighting contract in Hemstreet Park; and that its entrance into this territory for street lighting or for any other purpose is "unfair and destructive competition" within the meaning of the provisions of the Public Service Commissions Law which protect an existing company already in possession of territory against such competition.

The Commission points out that the entrance of the new company will not impair the solvency of the Halfmoon Company nor furnish injurious competition. The Halfmoon Company is the larger and more prosperous of the two companies with its principal place of business at Halfmoon, and its business in Hemstreet Park constitutes but an insignificant part of its entire volume of business. The Commission says:

"We are inclined to believe, under all the circumstances, that the application of the Mechanicville company should be granted. Very likely it is true that the Mechanicville company will not find it profitable to carry out the terms of its street lighting contract in a way which will give satisfaction to the people of Hemstreet Park. It may have agreed to do the work at too low a price. The testimony which tends to show that the electric service given by the applicant elsewhere is not very good may all be true. The local authorities of the Town of Schaghticoke may not have decided wisely in making such a contract as they did with the Mechanicville company. Possibly it might have been better for them to have done business with the Halfmoon company at a higher price. We do not think it necessary to pass judgment on these questions. They are matter with regard to which the members of the Town Board of Schaghticoke may perhaps at some future time have to account to their constituents, but we do not regard them as questions into which we must inquire closely in these proceedings. As a matter of fact, the Halfmoon company will be the beneficiary of any failure on the part of the Mechanicville company to carry out its agreement with the Town of Schaghticoke. A failure by the last mentioned company to live up to its contract with the Town of Schaghticoke would necessarily mean that the people of the locality will have to turn to the Halfmoon company for their electric service. We think the objecting company must content itself with that situation.

---

"The provisions of the Public Service Commissions Law which give an existing company protection against ruinous competition from another concern seeking entrance into its territory relate to actual, rather than to merely theoretical dangers of this sort. It is obvious that there would be no real danger to the solvency of the Halfmoon company if the present application for leave to carry out its street lighting contract in Hemstreet Park were granted. If through subsequent applications by the Mechanicville company to enter other portions of the Halfmoon company's territory the question of unfair competition should hereafter concretely arise, the powers of this Commission could then perhaps be invoked by the Halfmoon company to protect it against such competition. But the Commission's intervention now would not, we feel, be warranted. The dangers alleged have no present actuality whatsoever. They might almost be called imaginary. The Halfmoon company's entire ability to survive such 'competition' as it is here threatened with is conceded. And the framers of the Public Service Commissions Law never intended, we believe, to so far kill off competition between electric light companies as to contemplate the possibility of intervention by the Commission in a case like the present—where the people of a locality have indicated a decided preference for a weak concern against a strong; and where this local preference, however mistaken it may be, can be exercised without any real injury to the larger of the two competitors. The Halfmoon company, a perfectly reliable concern, seems for the moment to be so much out of favor with the town authorities of Schaghticoke as to have lost a little street lighting contract to a much smaller and weaker company. If the town authorities and residents suffer in consequence from bad electric service, they have no one but themselves to blame. The resulting situation is not one of those for the remedying of which public service commissions were organized. It is a situation requiring home treatment exclusively, if it requires any. It will probably correct itself. At all events we feel that we should be exceeding our legal powers if we were to try to intervene in it.

"Even if the Halfmoon company should now be willing rather than have this application granted, to take the contract which the Mechanicville company has with the Town of Schaghticoke, at the figure agreed to by the Mechanicville company, it would make no difference. The Town of Schaghticoke has not so far as we are advised, signified its willingness to substitute the Halfmoon company for the Mechanicville company nor has the Mechanicville company indicated any disposition to relinquish its rights without a struggle. Surely, under the circumstances it is not our duty to try to compel them so to do.

"The application of the Mechanicville Electric Light and Gas Company for leave to construct its lines and exercise its franchise in Hemstreet Park, town of Schaghticoke, Rensselaer county, is therefore granted."

## ANNUAL REPORTS

### INDIANA

#### 252—Commission Annual Reports.

The Annual Report of the INDIANA PUBLIC SERVICE COMMISSION, For the Fiscal Year Ending April 30, 1914.

The Indiana Commission has issued its first annual report. The report contains a rather complete discussion of the constitutionality of, and necessity for, the special legislation conferring jurisdiction on the Commission; and an analysis of the powers and duties conferred upon the Commission as compared with similar provisions in the public utility laws of other states. This discussion covers the following subjects: powers of the commission; depreciation; annual reports of utility companies; adequate service and facilities; unjust discrimination; transfer or lease of public utility property; the issue of stocks, bonds, notes or other evidences of indebtedness; and the indeterminate permit. An account of the organization of the Commission and its various departments, and a brief abstract of the work accomplished and decisions rendered are given. Rates of the various electric, gas and water utilities of the state are given in tabulated form.

The following are extracts from the Commission's discussions on various subjects of interest:

#### 112.1—Indeterminate Permits.

"This provision of the law is peculiar to Wisconsin. It is made a part of our act. By the surrender of its license, permit or franchise, any utility can obtain a perpetual right to transact its business where it is at the time it surrenders its franchise, license or permit.

"The effect of the indeterminate permit is to rid the utility of every burden it had assumed under the franchise (except as limited by the proviso in Section 7). In return the utility concedes the right of the municipality in which the greater part of its property is situated, to take over at any time the property of such utility that is used and useful for the convenience of the public, at a value to be determined by the Commission."

#### 146—Transfer or Lease.

"Section 95 of our act covers two subjects. The first sentence provides, 'that no public utility shall sell, transfer or lease its franchise, works or system, or any part of such franchise, works or system, to any other person or corporation or contract for the operation of its works or system, without the written consent of the Commission, after a hearing.'

"This is one of the vital provisions of the theory of the regulations of public utilities. Public service corporations are natural monopolies.



Our public service act is founded upon the assumption that this is true. These natural monopolies are often buttressed by very favorable franchises. The provision of the law now under consideration is the legislative expression of the will of the people that this monopolistic power shall not be extended except on terms that the Commission shall approve after a hearing. This is correct in theory. Existing monopolistic power ought not to be extended or enlarged. The surrender of the rate-making power ought, generally, to be a condition of the transfer and sale of these properties. The grant of enlarged opportunities ought to be hedged about with clear and powerful limitations. Unrestrained monopoly is always dangerous. When intelligently and sternly controlled by the state, monopoly may be made to render sternly efficient service for less compensation than could be obtained under the same circumstances from unbridled competition."

**132—Protection from Competition.**

"But competition has not been entirely overthrown by the new act. Where there is in a community a utility producing a service or product, and steadfastly holding to an unconscionable franchise, the law permits the Commission to authorize a competitor to enter the field. As the Commission is at present constituted, it would cheerfully build up a rival to jar existing monopoly and an unwarranted franchise apart. There is enough of the spirit of competition left to temper the winds to the shorn lamb, where the people are active."

**149—Holding Companies.**

"Section 95 further provides, 'That no utility shall directly or indirectly acquire the stocks or bonds of any other corporation incorporated for or engaged in the same or a similar business or purporting to operate or operating under a franchise from the same or any other municipality without the consent of the Commission.'

"This was intended as a blow to holding companies. These holding companies are growing on what they feed on. Before the enactment of the law foreign banking syndicates were buying up the utilities of the State through these holding companies. As a result, the door of opportunity was closed to local investors and capitalists and the people saw strangers entrusted with the control of public necessities.

"It is our judgment, that the greatest constitutional power of the Legislature ought to be exerted to prevent one public service corporation from buying a controlling interest in another public service corporation, and especially so when they are in the least competitors.

"The public service acts of some of the other States hedge this condition about more perfectly than does ours. The Illinois Utility Act Provides: 'That the Commission must be satisfied that the public will be inconvenienced thereby.'

"In the Michigan act there is this provision: 'If upon the hearing of such application it shall be made to appear to the Commission that such sale, lease, merger or consolidation is in furtherance of

public convenience and necessity, and that the property to be sold or leased is of at least the value at which it is to be taken, etc.'"

**200—Public Service Regulation—Law and Practice.**

"The public does not underwrite investments in public service corporations. The investors in such properties take their own chances, as do the investors in properties not impressed with the public interest. The State has asserted the right to regulate these properties in a reasonable way. This it has a right to do.

"So long as the Legislature enacts laws, the administration of which is imposed upon us, we will earnestly perform our duty. Where a discretion is vested in us we will cheerfully exercise it where the company has made a reasonable effort to comply with the law. Otherwise not."

**222—Accounts.**

"It appears that our public utility act and that of Wisconsin are the only two mandating the Commission to prescribe uniform systems of accounts. Each of the others and the Interstate Commerce Act leaves the prescribing of the accounts to the discretion of the Commission. To enforce this provision arbitrarily and with unyielding rigidity at once would result in a great sacrifice to the utilities and directly through them to the people of the State. The provision is a just and necessary one when administered with prudence and with a reasonable regard to the circumstances and convenience of the separate utilities. It would be a misfortune and an absolute loss to the State to demand peremptorily that each utility on a given day conform to a given system of accounts. The enactment of this mandatory provision, however, is a wise enactment in that it gives notice to the utilities that as rapidly as is consistent with the due administration of their affairs they must adopt the system of uniform accounts prescribed by the Commission.

"It will be observed that the section provides a method of protection for the utilities, in that they may lawfully use a system of accounts and books and forms that are prescribed or approved by the Commission. The meaning of the words 'or approved' is this: That wherever a practical, useful, scientific system of accounts is followed by any given utility, and books and records that will serve every purpose for some time to come, such utility so circumstanced has the right to ask the Commission to permit the use of the present system of accounts and the books and records at the time on hand, until such books and records have answered the purposes for which they were reasonably intended at the time of the purchase.

"With this interpretation of the law, we think the mandatory provision is a wholesome and a wise one.

**980—Public Relations.**

"It is our judgment that the railroads spend annually large sums of money in fruitless strife with the people of the State. We believe

that the roads are most prosperous that cheerfully co-operate with progressive public sentiment, and that under like conditions such a course will always be more profitable than an attitude of stubborn defiance to the will of the people. Our suggestion to the railroads, and to the Legislature in its capacity as the representative of the people, is that they act in harmony and in concert in the enactment and devising of further legislation touching the railroads of the State.

The wealth represented by these properties, the power they may lawfully exert, the influence they may unlawfully wield, demands that there be stern and unyielding regulations of the railroads of the State and of the Nation. When these corporations enter earnestly into an effort to co-operate cheerfully with the average citizen of the State touching his affairs and the affairs of these corporations, we think there will be an end of strife and a return of more prosperous conditions."

## **WASHINGTON**

### **252—Commission Annual Reports.**

The Annual Report of the WASHINGTON PUBLIC SERVICE COMMISSION, Covering the Period from December 1, 1913, to November 30, 1914.

The report contains the Commission's decisions rendered during the period covered, opinions of the Attorney General, and a brief review of the Commission's work for the year. There is very little in the report pertaining to electric companies. The Commission's order for supplementing and amending rules in the Act of the Legislature of 1913, Chapter 130, Relating to Electrical Construction, issued August 14, 1914, is not printed in the report, but a statement is made that copies in pamphlet form will be furnished on application.

## **NEW JERSEY**

### **315.4—Franchise Value.**

Recommendations of the NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS. Part of the Annual Report For the Year Ending December 31, 1914. Pamphlet 24 pages.

In discussing the decision of the Court of Errors and Appeals in the Passaic Gas rate case (6 RATE RESEARCH 180, 195) the Board says:

"In the Passaic Gas Rate case, the Legislature not having specifically referred to the value to be placed on the franchise in fixing a

rate, the Board did not apply the rule apparently laid down by the Court of Errors and Appeals.

"So long as the decision of the court is in effect, and the law is unchanged, the action of the Board must conform to the decision. The Board does not understand that the decision of the court questions the right of the Legislature to declare a State Policy different from that now held to be in effect.

"In accordance with the provision of the Public Utility Act which directs the Board in reporting to the Governor to make 'such recommendations as it may deem proper,' the Board, in view of the foregoing, respectfully recommends that consideration be given to the advisability of amending the public utility act so that it shall clearly appear, as the legislative intent, and as an authoritative declaration of State policy, that the Board, in fixing just and reasonable rates to be charged by a public utility, shall not value the franchise of such utility in excess of the amount the Board finds to have been legitimately spent in procuring it. Such is the policy of the State, as specifically declared in the public utility act with respect to the capitalization of franchises."

## **COURT DECISIONS**

### **MICHIGAN**

#### **110—Establishment.**

**CITY OF LANSING V. MICHIGAN POWER COMPANY.** Decision of the MICHIGAN SUPREME COURT, December 19, 1914. 150 Northwestern 250. The City of Lansing instituted an action to compel the defendant to remove from the public streets the poles and wires and equipment installed therein by the defendant for the purpose of transmitting electric current for power and lighting purposes. The City of Lansing has a municipal electric plant furnishing light and power service. The city claims that the defendant's only right in the streets arose out of a franchise granted to the defendant's predecessor which has expired by reason of its terms of limitation. The defendant claims that it is using the streets under the grant of the Legislature contained in Act 264, Public Acts of 1905. The Supreme Court quotes in full the opinion of the Circuit Court from which complainant appeals. The decision of the lower court says:

"The act of 1905 tendered a franchise to defendant; such franchise was accepted by defendant by way of installing its service equipment in the public streets and providing a service of a public utility; and this tender and acceptance constitute a contract between the state and defendant beyond the power of the Legislature, the Constitution, or of this court to impair by destroying the contract right to remain in the streets.

"It is true that it is not every act of the Legislature providing for incorporation or relating to corporate rights and privileges that will constitute a contract, but when the Legislature by act invites a public utility corporation to expend money in establishing a plant, upon the grant of the right, to use the public streets, then upon accepting the grant and establishing the plant and installing the public service equipment in the streets, there has come into existence a contract beyond the power of any division of the government to impair by recall of the grant to be upon the public streets."

The lower court pointed out that the Legislature of 1905 either purposely or thoughtlessly made the grant without fixing any period of enjoyment and concluded:

"In the absence of a declaration of a period during which the right might be enjoyed, it is the law in this state that it may be enjoyed for the period of the statutory life of the corporation [thirty years]."

After stating the opinion of the lower court the Supreme Court holds as follows:

"We agree with counsel for defendant that it is immaterial to the consideration of this case whether the grant was for the life of the corporation or in perpetuity. The circuit judge took the view that the grant was for the life of the corporation. We do not pass upon that question. In all other respects we concur in the conclusions of the circuit judge and the decree below dismissing the bill of complaint is affirmed, with costs to the defendant."

## **REFERENCES**

### **RATES**

#### **600—Rate Differentials.**

THE BEST CONTROL OF PUBLIC UTILITIES, by FRANK G. BAUM, 4 pages (to be continued). *Journal of Electricity, Power and Gas*, January 23, 1915, p. 57.

It is stated as an axiom that the best control of a utility is that which develops an eagerness and ability on the part of the company to furnish the service, and an equal eagerness and ability on the part of the consumer to purchase the service. Class rates are discussed as one of the factors which may be made to promote the best interests of the business. After a general discussion of the need of different rates for different classes of electric service, various methods for determin-

ing class rates for such service are outlined. (The article is abridged from a paper presented before the San Francisco Section of the American Institute of Electrical Engineers, January 22, 1915.)

## INVESTMENT AND RETURN

### 312—Inventory.

INSTRUCTION FOR FIELD WORK IN MECHANICAL DEPARTMENT and ROADWAY AND TRACK DEPARTMENT of the Division of Valuation, INTERSTATE COMMERCE COMMISSION. Pamphlets, 17 and 18 pages, respectively, October 1, 1914.

The Division of Valuation of the Interstate Commerce Commission has issued in pamphlet form the first tentative draft on instructions for field work of the mechanical department and a second tentative draft on instruction for field work of the roadway and track department to be used in the preparation of an inventory of the fixed physical property of railway carriers.

### 360—Depreciation.

ACCOUNTING FOR DEPRECIATION, by JAMES R. CRAVATH. 1½ pages *Electrical World*, January 23, 1915, p. 213.

The importance of proper accounting for depreciation is urged in this article from the standpoint of the examining engineer or stockholder. Necessity for a provision for depreciation has been ignored by many companies for many years, but rate regulation has brought about the realization of the importance of making provision for depreciation in their accounts. Simple methods of accounting from which adequate information may be secured as to the company's method of handling depreciation are discussed, and the writer concludes that "opinions may differ as to the desirability of showing on balance sheets and statements the first cost of the property, the total depreciation accrued to date, and the depreciation paid to date, but the intelligent reader of such statements could form a much better idea of the real treatment of depreciation if these figures were obtainable readily."

## GENERAL

### 900—General.

THE HIGH INTENSITY STREET LIGHTING OF EUROPEAN CITIES COMPARED WITH NEW YORK, by C. F. LACOMBE. (Reprinted from *The Transactions of the Illuminating Engineering Society*, Vol. IX, p. 614). Pamphlet, 23 pages.

The factors and considerations which influence the design of street lighting installations in the large cities are outlined and the difference between European and American practice is pointed out.

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February 4, 1915

No. 19

# RATE RESEARCH



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# Rate Research

WILLIAM J. NORTON, Editor.

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CONTENTS	Page
<b>COMMISSION DECISIONS</b> .....	291
Idaho .....	291
Massachusetts .....	296
Compilation of Rules and Regulations <i>in Re</i> Customer's Deposits ..	298
<b>REFERENCES</b> .....	302
Rates .....	302
General .....	302
Court Decision References .....	302



# Rate Research

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Vol. 6

CHICAGO, FEBRUARY 4, 1915

No. 19

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## COMMISSION DECISIONS

### IDAHO

#### 132—Protection from Competition.

Application of the IDAHO POWER AND LIGHT COMPANY for a Certificate of Convenience and Necessity. Decision of the IDAHO PUBLIC UTILITIES COMMISSION, Granting the Petition, January 16, 1915.

Before giving an abstract of the decision in the present case it is important that a brief history of the case be given.

In the decision rendered February 18, 1914 in the case of the Great Shoshone & Twin Falls Water Company vs. Idaho Power and Light Company, the Commission ordered the defendant to desist from the construction of its system to serve the territory occupied by the Great Shoshone Company and rendered a decision in favor of protection of the established company from needless competition. (4 RATE RESEARCH 391.) The Defendant applied to the Supreme Court of the State for a writ of review and the same was duly prosecuted in the Supreme Court and a decision rendered June 27, 1914. In this decision the Supreme Court fully reviews the decision of the Commission and defines the scope and intent of the public utilities law. The order made by the Commission was affirmed. (5 RATE RESEARCH 343.)

Following the conclusions reached by the court, the Commission again rendered a decision in the matter dated November 7, 1914, refusing the certificate of convenience and necessity to the Idaho Power and Light Company to enter the territory in question. In this decision the Commission finds that the Great Shoshone company is rendering adequate service and has proved itself willing to meet the suggestions of the Commission for a reduction of its rates. The Commission says of this company:

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EDITORIAL NOTE.—All indented matter is direct quotation.

**132.2—Fair Rates and Efficient Service**

"We imagine that it would be a very rare case where a utility of the magnitude of the existing utility herein, with its many distributing points, its great list of customers, and the diversified uses to which its output is applied, if there would not be found many complaints against the service furnished. As the management of such a utility involves the employment of many individuals it cannot be expected that the administration of its affairs would be absolutely perfect. The frailties and short-comings of human effort in whatever walk of life, are not removed when men are engaged in the service of public utilities. The record shows that the existing company has made commendable efforts to serve the locality in which its plants are located. It has extended its lines to small villages and communities, involving much expense to reach. It has encouraged the development of farm interests by stretching its lines to remote points where pumping of water has been necessary to reclaim desert places; it has furnished electrical energy for power and lighting purposes to the farmer located not too remote from its lines, and where the same could be done without involving an expense that was prohibitive; and, upon the whole its course and policy has been as free from criticism as could be expected under the circumstances."

The applicant, however, further asserted its ability to make a greater reduction in rates if it is given the opportunity to furnish the service. The Commission finds that this assertion was not given substantial proof and that if there is any difference to the two companies in the cost of furnishing the service, it is in favor of the present company. The decision says:

"This assertion of what the applicant will do if permitted to enter the field is not inconsistent with what it naturally would do should it enter the field in the absence of any authority to control or regulate it. When one company enters the locality occupied by another, the usual sequence is the cutting of rates on the part of both in order to procure on the one hand a part, or all the patronage then enjoyed by the existing company; and, on the other hand the efforts of the existing company to hold its patronage. This is what, in common parlance, is termed 'cut throat competition' and is recognized in this day as a palpable evil and which the statute was intended to suppress. So that the profit held out by the applicant, alluring as it may be, should not so becloud our view as to cause us to lose sight of the usual disaster which follows such a fair beginning, and which experience has shown invariably results in a monopoly of ownership with a duplicate investment. . . ."

**132—Protection from Competition**

The Commission reviews the decision of the Supreme Court and quotes from decisions of other authorities who have decided in favor of pro-

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tection from competition and the conclusion of the Commission is in part as follows:

"This commission has had some experience, in the short time it has been in existence, with electrical companies which are temporarily in competition, pending an interim to determine which of the companies will eventually absorb and control the other. There is scarcely a week passes without there being referred to us the complaint of the one against some undue practice adopted by the other to secure patronage. These companies, recently, have had a well organized division of canvassers going from house to house and there besieging consumers with the alleged advantage of their respective facilities in order to induce the change of patronage from one to the other. One of the managers of these companies reported to this Commission very recently that the two companies, in his opinion, were expending \$3,000 per month for the services of these solicitors, which creates a useless expenditure and is necessarily a loss to the companies.

"Much reference has been made during the course of these proceedings to the effect of the policy of the Commission (should it fail to allow the application for a certificate of public convenience and necessity) in retarding the development of the state's resources. . .

"The law may be incongruous with the best interest of the state. It is, or it is not. In the application it was not intended to be of the character with which a trial balance could be struck. Its virtues were not intended to be neutralized by its vices. Its problems were not to be solved upon the theory that results would be obtained by a process of cancellation. The numerals representing its percentage of worth must bulk largely on the upper line; otherwise, it should not exist. As it follows the best thought as contained in the statutes of older states, and as tested by experience, it will be hard to decapitate it or even to seriously emascuate it, without killing it. These are questions for the legislature which will soon convene. Until, however, the law is repealed or modified, with its meaning now defined by the Supreme court, we cannot see wherein we are permitted to change the views heretofore expressed in the cases involving the section of the statute in question which have come before us."

On December 9, 1914 (a change in the membership of the commission having taken place) an order was issued again opening the case for rehearing. In the decision as of date, January 16, 1915, the former position of the Commission is reversed. The effect of the latter decision is to permit the entrance of a second utility in the territory in question. The Commission says:

"Having taken our Public Utility Law almost literally from the California Law, we are presumed to have adopted also the interpretation theretofore placed upon it by the California Railroad Commission."

The Commission then cites the holding of the California Commission in the case of the Pacific Gas and Electric Company vs. The Great Western Power Company, (Volume 1, of the California Reports, Page 203.) The Commission then says:

"It is urged that the policy above enunciated, if competition were permitted, would result in the ultimate consolidation of competing companies, after a period of more or less fierce competition, whereafter the consolidated utility claimed the right in the courts to receive from the public rates high enough to yield to the company a return on all the property of the original competitors, including the property which had been duplicated and a large portion of which had been 'junked'. This objection is imaginary rather than real. This would be true if 'cut throat' competition were permitted and typifies the condition of affairs before the enactment of the Public Utilities Law.

"In the first place, this Commission is given the right to establish rates of all utilities, and it shall be the policy of this Commission to see that all utilities will be allowed a just compensation of the value of their property used and useful for the public purpose, they cannot continue to expect the public to pay to them rates high enough to yield unreasonably high returns on the property. So that if a new company should be permitted to enter the territory now served by the Great Shoshone Company, competition will exist only as to the kind and character of service to be rendered and the numerous and divers uses to which electric energy may be applied.

"Idaho is a young and growing state, with tremendous possibilities of development, and it seems against public policy that this Commission should take any step that would tend to tie up the unlimited undeveloped water power of this state and thereby retard the development of our resources. The development of this natural resource, lying at our very doors, should be encouraged so that the people may enjoy the privileges and comforts which are rightfully theirs. . .

#### **132.2—Fair Rates and Efficient Service**

"We therefore, conclude that the California rule as herein enunciated is the only rational rule for this Commission to adopt. Having adopted a rule in this matter, we must next make the proper application of the facts in this case and determine if they fall within said rule. There are three questions which present themselves for consideration, viz.:

"1. Was the Great Shoshone & Twin Falls Water Power Company rendering adequate service in the field in question at the time of the threatened competition by the applicant herein?

"2. If the service was adequate, were the rates reasonable?

"3. Was and is the territory in question completely served by the Great Shoshone & Twin Water Power Company?"

---

The Commission, after discussion of the testimony offered, concludes that the

“Great Shoshone Company was and is in a position to render reasonably good service to the citizens of the communities in question.” In the matter of rates the Commission points out that before the threatened competition, in 1912, the company had in effect a maximum rate of 15 cents which has been reduced to a maximum of 9 cents at the present time.

“We, therefore, must conclude that the Great Shoshone Company at the time the territory in question was threatened with competition, was not furnishing electrical energy to the inhabitants of the various cities, towns, and villages, in said territory at reasonable rates.”

The Commission, however, does not make any further statements in regard to the reasonableness of the rates at present offered by the Company.

#### 132.8—Unnecessary Duplication

“We next come to the third proposition. Was and is the territory in question completely served by the Great Shoshone Company? The record shows that the Great Shoshone has constructed 96.87 miles of rural distribution lines, scattered over six counties and radiating out from 18 different cities, towns and villages as distributing centers. From those facts we can hardly conclude that the entire territory of those six counties was completely occupied by the Great Shoshone Company. The California Commission in the case of the Pacific Gas and Electric Company vs. Great Western Power Company, *supra*, page 212, said: ‘But the fact that a power line, for instance, crosses a county and in the immediate vicinity of its line is distributing electricity for power and light purposes, certainly could not lead us to conclude that the entire territory of such county was completely occupied by the existing utility.’

“Another question urged by the applicant was that the Idaho Power and Light Company can furnish power more cheaply than the Great Shoshone Company by reason of its smaller investment. Evidence was introduced showing the property cost of the Shoshone Company to be something like \$4,217,203.84 while that of the Idaho Power and Light Company was \$2,192,009.20. These figures were compiled from the annual reports of the companies filed with this Commission. This matter of values or cost was very lightly touched upon and we can hardly give very much weight to the same. We would hesitate considerably before accepting the same as final in a rate-making contest. We are satisfied from the evidence introduced, however, that the Idaho Power and Light Company can furnish power as cheaply, if not more cheaply, than the Great

Shoshone Company and that is as far as we care to discuss the matter in this case."

### **132—Protection from Competition**

"We do not wish to be understood as holding, or intending to hold, that the door of competition will be thrown wide open in this State; but, unless it is shown that the utility desiring to enter a competitive field can give such service as will be a positive and material advantage to the public, it will not be allowed to enter a field already occupied; PROVIDED always, that the existing utility is furnishing the public in its territory with adequate service at reasonable rates at the time of the threatened competition. Each case must be decided upon its own particular merits.

"With the findings above set forth and the views herein expressed, the conclusion which must follow is that the Order heretofore entered in this case on the original hearing, being Order No. 169, should be vacated and set aside, and that the application of the Idaho Power and Light Company for a certificate of convenience and necessity be granted."

## **MASSACHUSETTS**

### **371—Sliding Scale of Rates and Dividends.**

COMPLAINT VS. BOSTON CONSOLIDATED GAS COMPANY, Alleging that the Prices Charged for Gas Service are Unreasonable. Decision of the MASSACHUSETTS BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS, Holding That the Board Will Not Interfere With the Prices Established by the "Sliding Scale" Act of 1906. December 21, 1914.

The rates to be charged by the Boston Consolidated Gas Company were established by Chapter 422, Act of 1906 entitled "An Act to promote the reduction of the price of gas in the city of Boston and its vicinity," Sections 1 and 2 of this Act read as follows:

"Section 1. From and after the thirtieth day of June in the year nineteen hundred and six, the standard price to be charged by the Boston Consolidated Gas Company for gas supplied to its customers shall be ninety cents per one thousand cubic feet, which price shall not thereafter be increased except as hereinafter provided. From and after the said date the standard rate of dividends to be paid by said company to its stockholders shall be seven per cent per annum on the par value of its capital stock, which rate shall not thereafter be increased except as hereinafter provided.

"Section 2. If during any year ending on the thirtieth day of June the maximum net price per thousand feet charged by the company has been less than the standard price, the company may during the following year declare and pay dividends exceeding the standard rate in the ratio of one fifth of one per cent for every one cent of reduction of said maximum net price below the standard price."

The Board holds that it is not justified in disturbing the provisions of this law. In regard to the question raised at the hearing as to the constitutionality of the act the Board says that this is a question upon which the courts alone can reach any authoritative decision. The Board makes the following statement in regard to the "sliding scale" act:

"This act, which was to take effect upon its passage, was approved May 26, 1906, and was accepted by the company within the time and in the manner prescribed by its section 11. It was the result of an investigation ordered by the Legislature in 1905 (Resolves, chapter 101), creating a special committee 'to consider the automatic and interdependent adjustment of the price of gas to consumers, and the rate of dividends to stockholders of gas companies, under what is known as the London Sliding Scale, with special reference to the expediency of applying that scale to the gas light companies in the city of Boston and town of Brookline.'

"The intent of this legislation was plainly to establish the price at which this company might thereafter sell gas, and the rate of dividends which it might thereafter pay to its stockholders, and to make the self-interest of the stockholders the effective and only means by which reductions in the price of gas might be accomplished. In furtherance of this purpose the act carefully provides that any profits in excess of certain reserves and of the authorized dividends shall inure to the public, not in a reduction in the price of gas, but by their division among the cities and towns supplied. Still further to safeguard this plan for regulating the price of gas, any additional capital stock must be sold at auction instead of offered to the stockholders, as was then and is still the law relating to all other gas companies.

"It is obvious that such a scheme of regulation required for its fair trial the lapse of a sufficient time to give full play to the motives and conditions which were expected to make its operation effective. To this end it is expressly provided in section 9 that at any time after June 30, 1916, this Board may, upon the petition of the company or of the mayor of any city or selectmen of any town in which the company is supplying gas, lower or raise the standard price. And it is further provided in section 10 that 'The provisions of sections thirty-four and thirty-five of chapter one hundred and twenty-one of the Revised Laws, so far as they relate to the fixing of the price of gas, shall not hereafter apply to the Boston Consolidated Gas Company.' . . ."

**COMMISSION DECISIONS****COMPILATION OF RULES AND REGULATIONS IN  
RE CUSTOMER'S DEPOSITS.**

Continued from 6 RATE RESEARCH 265

**PENNSYLVANIA.**

The Commission has ordered that all public service companies imposing penalties for failure to pay bills promptly, or allowing discounts for prompt payment of bills, must provide in their posted and filed tariffs, a rule clearly stating the said purpose for which, and the exact circumstances and conditions under which penalties are imposed and discounts allowed, and in the case of allowance of discounts, stating in clear and unambiguous terms, whether or not, payments mailed, as evidenced by United States post mark, on or previous to the last day of the discount period, will be deemed by the company to be payment of the bill within such discount period. The Commission expressed no opinion with respect to the advisability of the continuance or adoption of a rule providing for the mailing of a payment on the last day of the discount period, but issued the ruling merely for the purpose of requiring that such practices as are in vogue, or as may be adopted, shall be clearly set forth in the tariff and applied equally and without discrimination or preference to all shippers, consumers and patrons under like conditions and under similar circumstances as provided by the Public Service Law. Public Service Companies are ordered to comply with this ruling on or before March 1, 1915, on five days' previous notice to the Commission and the public.

**SOUTH DAKOTA.**

(1) The Commission, in considering the complaint of F. J. Maw, et al., vs. Grant Co. Tel. Co., quotes at length from the decision of the Wisconsin Commission in the *Berend v. Wis. Tel. Co.* (given under Wisconsin, No. 1. See p. 300,) and from the decision of the Supreme Court of the State of Washington (*State of Washington ex rel. Thomas B. McMahon v. Independent Telephone Co.* 59 Wash. 159, 109 Pac. 366). The holding of the Court is, in part, as follows:

"It will not be doubted that a telephone company has the power to establish regulations and rules for the operation and conduct of its business in a given territory, when such rules and regulations are reasonable in their requirements and not in conflict with any provision of general law, or any special provision of the franchise under which it obtains and exercises its rights in the territory. Telephone companies, being public service corporations, are charged with certain public duties which they may not refuse, and any rules and regulations which fall within the character above referred to, which is reasonably proper and necessary to enable them to fulfill and dis-



charge these public duties, and render the public efficient service, will be enforced. A rule requiring the payments of the monthly rentals in advance is a regulation of the permitted character, and so is the further regulation that, unless the service is paid for in advance, it may be denied. The company being bound to render the public efficient service, it has the right to enforce such rules as will provide for the prompt payment of its rentals, and thus provide for the securing of funds with which to insure and protect the efficiency of its plant, and keep it at such a standard as will enable it to discharge its public duties when called upon to do so, either voluntarily at the request of the individual, or involuntarily at the command of the courts. Being a public service corporation, it is compelled to serve the individual when such service is demanded, but this does not take from it the right to demand that the continuance of such service be conditional upon the prompt payment of a reasonable rental, which shall be sufficient and at the same time provide a reasonable profit for itself. This is the reasoning upon which the courts have held the companies of this character justified in withdrawing their service when their charges are not promptly paid, or where a regulation fairly and generally beneficial to the company and its patrons remains uncomplished with. *Rushville Co-op. Telep. Co. vs. Irvin*, 27 Ind. App. 62; 59 N. E. 327; *Newlett vs. Western Union Teleg. Co.* (C. C.) 28 Fed. 181; *McDaniel vs. Faubush Telep. Co.*, 32 Ky. Rep. 572; 106 B. W. 625; *Jones Teleg. & Telep. Cos.*, Sections 341, 352. Manifestly, if all the subscribers of appellant continuously refused to pay their rentals in advance, and thus necessitated the employment of collectors, additional office force, and the incurring of other expenses, incident to the collection of such rentals, the moneys thus expended must be taken from the revenue of the company, and thus impair a fund to which the company must look for the expenditure necessary to keep its plant in the highly efficient condition required and demanded because of the public nature of the service. It is therefore not unreasonable that the company adopt a rule and enforce a regulation providing for the payment of its rentals in advance, and for an additional charge in case such requirement is not complied with. . . .

"It is the policy of the law to require public service corporations to furnish service to all on equal terms for reasonable consideration. If losses are incurred by telephone companies by reason of rentals never collected and they are put to expense for the collection of other rentals, the amount of the loss and extra expense is borne by all those who pay, those who pay promptly as well as those who are delinquent. It is, therefore, in the interest of the public that telephone companies should make such reasonable rules and regulations as to the payment of rentals as will reduce the loss on rentals never paid and the expense for collection to the minimum. At a hearing before the Commission some time ago the evidence showed that on the average, telephone companies lose three per cent. of the gross revenues by reason of losses on unpaid rentals, thus putting an

additional burden upon the subscriber, who does pay, of three per cent." (F. J. Maw, et al., vs. Grant Co. Tel. Co. Decided October 1, 1912.)

### **WASHINGTON.**

(1) A letter of the Commission written in answer to questions of the Pacific Telephone and Telegraph Company, contained informal rulings in regard to requiring deposits by subscribers of telephone companies. The following questions were answered in the affirmative:

1. "Have we the right to require a deposit from a new consumer, or from an old consumer who moves to a new location, who does not own the premises occupied?"
2. "Have we the right, in certain instances, at our option, to waive the requirement of a deposit as above and accept a guarantee?"
3. "Have we the right, in certain instances, at our option, to waive the requirement of a deposit and a guarantee?"
4. "Have we the right to waive the requirement of a deposit and a guarantee in the case of consumers owning their own premises?"
5. "Have we the right, in exceptional cases, to require a deposit, or a guarantee, of a consumer owning his own premises, but from whom it has been difficult to collect our accounts, or whose credit we know to be poor?"

### **WISCONSIN.**

(1) In the Berend v. Wisconsin Telephone Company Case, the respondent refused to furnish the petitioner with telephone service unless the petitioner would deposit with the respondent the sum of \$10.00, as security for the payment of bills. The Commission discusses the reasonableness of the company's rule and of similar rules securing the company prompt payment of bills. The decision says:

"In order to properly discharge its obligations to its patrons, it is manifestly essential that the company receive promptly at stated periods, all indebtedness due for service rendered, and that no losses be incurred, if preventable, by reason of uncollectible accounts of either the dishonest or the impecunious patron. The necessity of some regulation, therefore, that will accomplish the object sought to be obtained by the rule in question, is apparent upon consideration of the nature and character of the company's public undertaking. Every public service corporation is required by law to furnish adequate and efficient service to the public according to the development and state of the art at the time the service is performed, and to exact therefor only reasonable compensation. Thus, to fulfill its public duty, it must at all times keep and maintain its plant in a proper state of repair and in an efficient operating condition, adopt new inventions as they arise, make extensions and improvements of its plant when necessary and required for the convenience of the public, and continue its services without cessation whether profitable or unprofitable. It is by statute subject to public supervision as to the extent and quality of its service as well as to the charges it

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may lawfully exact therefor. The reasonableness of the rates it may charge the public is determined, in a great measure, by the net earnings left to the stockholders after deducting from the total operating revenues the expense of operation and maintenance, amount of annual depreciation of the plant and all other proper charges. Under the circumstances the successful administration of the affairs of such a corporation, so limited and restricted by the rules of the common and the statute law relating to such enterprises, makes it imperative that just compensation be promptly returned to the company for all services rendered by it to the public. In conserving the revenues of such a corporation and preventing reductions in the same from loss of accounts, the public is as much interested as the directors and stockholders of the company, for any material reduction in revenues, however caused, generally results, and often necessarily so, in increasing the cost of the service to the patron and diminishing the return to the stockholder. The burden thus occasioned is invariably cast upon and must be borne by both the public and the shareholders in varying proportions, depending upon the circumstances of each particular case.

“Although it is self-evident that no person can be served by a public service corporation without compensation without compelling others to pay the cost of such service, there are some who seem to regard this axiom as a mere paradox and look upon any regulation requiring that every service rendered by a public utility shall be paid for at reasonable rates, regardless of who the recipient of such service may be, as unjustifiable and contrary to good public policy.

“Rules and regulations of various kinds, having for their purpose the enforcement of the prompt payment of all indebtedness owing for services rendered by a public utility in the discharge of its public function to the public, and the elimination of chances of loss caused by extending credit to those who are unwilling or unable to pay, have long been in vogue, and their reasonableness has been passed upon by the courts in many instances. A review of several of the most important cases will be interesting and instructive to those who have not given the subject more than casual consideration. Among the first of the cases reported, in which the validity of a regulation of the character of the one here involved was under consideration, is *Shepard v. Milwaukee Gas Light Co.* 6 Wis. 539, 548, decided in 1858. In that case the company established a rule permitting it to demand security for the gas consumed, or a deposit of money to secure payment thereof. The court said that such regulation

\*\*\*appears to be just and necessary to guard against loss. As the delivery of the gas is necessarily its consumption, and as the amount delivered is ascertained by the amount consumed, it would seem to be just and right that the company should not be compelled to furnish it without reasonable security for payment, in convenient amounts and at proper periods.”

(To be continued)

## REFERENCES

### RATES

#### 450—Value of Service Theory.

THE VALUE OF THE SERVICE. Editorial, 1 page, *Journal of Electricity, Power and Gas*. January 30, 1915, p. 89.

Reference is made in this editorial to the paper on "The Best Control of Public Utilities" by Frank G. Baum, which was begun in last week's issue of the *Journal* (Noted in 6 RATE RESEARCH 287), and continued in this number of the *Journal*, page 79. The editorial points out that this paper strongly confirms the correctness of the "value of service" theory in rate-making, and proves the equity of the theory and clearly demonstrates its indispensability in the further development of the electrical industry. Average rates are based on the cost of service and from these class rates are segregated according to the value of the service.

### GENERAL

#### 920—Economy and Efficiency.

ECONOMIES IN POWER CONSUMPTION IN ELECTRIC RAILWAYS, by N. W. STORER. Paper Read At the Joint Meeting of the Chicago Section of the A. I. E. E. and the Western Society of Engineers, Chicago, January 25, 1915.

It is the purpose of this paper to show how certain economies in fuel consumption have been effected in the operation of street railways, and the possibilities of further economies are explained in some detail, especially from the standpoint of the electrical equipment.

## COURT DECISION REFERENCES.

#### 224.5—Rates Fixed by Contract.

UNION DRY GOODS CO. v. GEORGIA PUBLIC SERVICE CORPORATION. Decision of the GEORGIA SUPREME COURT, December 17, 1914, 83 Southeastern 946.

The petitioner contracted with the defendant company to supply it with electrical power and light upon stipulated rates for the period of five years. The contract was entered into prior to the enactment giving the Railroad Commission power to regulate rates of electric companies. After the contract had run more than a year the defendant company applied to the Railroad Commission of Georgia for an increase in rates. The Commission issued an order fixing rates and these maximum rates are in excess of the rates fixed in the contract between the petitioner and the defendant company. The main question to be determined by the court is the effect of the order prescribing a higher rate as reasonable upon the lower rate stipulated in the contract.

The court cites a number of cases in which it is held that the commission may prescribe rates higher or lower than those fixed by contract, and the holding of the court is in part as follows:

"At common law, if a public service corporation served all at reasonable rates, it performed its obligation, but modern industrial conditions demand the further requirement that it shall serve all with equality. They are usually clothed with the power of eminent domain, and this attribute of sovereignty converts them into quasi public institutions; and hence it has become the accepted modern doctrine that public service companies must not only serve the public at reasonable rates, but shall also serve the public efficiently and without discrimination. 2 Wyman on Pub. Ser. Corp., Sections 1281, 1289, 1290. The public have a right to demand efficient service, and the Railroad Commission is given full power to require that the companies shall render efficient service. Civil Code, 1910, Section 2663. It may be that the service rendered may be commensurate with the price charged for such service. But such service may not meet the requirements demanded by the developments and growth of the city. It is possible to conceive a case where the large majority of a city prefer more extensive service, and where the necessities of the municipal life demand an enlargement of the present service. The company is willing to meet the necessities of the case, provided a reasonable charge for the services rendered is permitted. The matter is submitted to the Railroad Commission. After full investigation the Commission is of the opinion that an enlarged service is necessary and proper under the circumstances, and fix a schedule of rates to be charged for the increased facilities. A few individuals may hold contracts binding the company to rates less than those fixed by the Commission as reasonable. Ought the development and necessities of the municipality in situations like this be controlled by a contract with a few individuals, or shall it be considered that the case falls within the proper exercise of the police power in the interest of the common weal? Manifestly, the public health, progress, morals, and general well-being of a municipality cannot be bound up in a contract with a few individuals. Hence we think that when the Railroad Commission prescribed a reasonable rate for electrical lighting and power companies, the rate thus established had the effect of overriding the contractual rate between the public service company and its patrons, made anterior to the Commission's order."

### 600—Rate Differentials.

ELK HOTEL COMPANY V. UNITED FUEL GAS COMPANY. Decision of the WEST VIRGINIA SUPREME COURT OF APPEALS, December 8, 1914, 83 Southeastern 922.

The defendant company having a supply of gas in excess of the amount of gas required in domestic consumption offered to supply the surplus at the rate charged to manufacturers, for consumption under boilers for generation of steam, and included in the offer several hotels in the city, provided they install boilers in their building for heating by steam or by hot water, reserving in all contracts for gas supplied at the reduced rate, the right to discontinue the service at such rate whenever the defendant should deem the surplus necessary for its consumers. The plaintiff declined to make any such changes or to agree to the conditions imposed, and as a result its competitors are receiving gas service at a lower rate than it enjoys. The plaintiff is in arrears in payments for services rendered and applied for an injunction restraining defendant from shutting off the gas supply to its building. A temporary injunction was granted by the lower court but was later dissolved and from the action of the lower court the plaintiff appealed. The Supreme Court says:

"That a public service corporation may classify those whom it serves, and fix different rates for each character of service, is elementary; or, as stated by 2 Wyman on Pub. Serv. Corp., Section 1232, 'from the very nature of the case classification goes far back into the law of public service;' the only legal inhibition being that it must not give an undue or unreasonable preference or advantage to or make an unfair discrimination among its consumers or patrons

where the conditions are alike and the circumstances similar. *Mercur v. Power Co.* 19 Pa. Super. Ct. 519. . . .

"The mere circumstances that advantage denied to one person inures to the benefit of another does not of itself show an undue preference to the latter. *Commission v. Railroad*, 5 Interst. Com. R. 671.

"An undue or unreasonable advantage or preference by a public service corporation results only from allowing to one person what it denies to another under substantially the same circumstances and conditions. 3 *Moore on Carriers*, 1795; *Telegraph Co. v. Publishing Co.*, 44 Neb. 326, 62 N. W. 506, 27 L. R. A. 622, 48 Am. St. Rep. 729. Only unreasonable and unjust discriminations are unlawful. Or, differently stated, it is only when the discrimination inures to the undue advantage of one person, in consequence of some injustice inflicted upon another, that the law intervenes for the latter's protection. *Hays v. Railroad Co.* (C. C.) 12 Fed. 309; *Hozier v. Railroad Co.* 1 Nev. & McW. 27. Whether particular rates are unreasonable, or the conditions and circumstances substantially similar or dissimilar, are questions of fact to be resolved upon a consideration of the proofs in each case; the burden always being on the complaining party. *Railroad Co. v. Commission*, 162 U. S. 184, 197, 16 Sup. Ct. 700, 40 L. Ed. 935. . . .

"An electric company may make a lower rate for current supplied for power in the daytime, its dynamos not being then operated to full capacity, than for illumination at night." . . .

"The record fully shows defendant's intention to treat alike all hotels similarly equipped for the consumption of its commodity. . . .

"Obviously defendant's classification and rates were not unreasonable or unjust. They did not afford undue or unfair advantage to one class, undue or unfair disadvantage to the other. Both classes had the same opportunity, the same privilege; one accepted, the other refused, the offer of service under substantially the same circumstances and conditions. Neither received favors not accorded to the other. Nor do we think the requirements as a prerequisite for the same service unfair, unreasonable, or unjust."

### 831.9—Municipalities—Liability for Damage.

PEARL V. INHABITANTS OF TOWN OF REVERE. Decision of the MASSACHUSETTS SUPREME JUDICIAL COURT, December 31, 1914. 107 North-eastern 417.

The question presented in this case is whether the defendant municipality is answerable in damages for injuries caused by the negligence of an employe of its Board of Water Commissioners. The Court says:

"The distinction long has been established between the liability of municipalities for acts done in their public capacity in the performance of functions required of them by the legislature for the common good and for acts done in their private capacity in the management of property voluntarily held and devoted to business enterprises undertaken for their own profit, although ultimately subserving a public need. *Oliver v. Worcester*, 102 Mass. 489, 499, 3 Am. Rep. 485; *Maynihan v. Todd*, 188 Mass. 301, 74 N. E. 367, 108 Am. St. Rep. 473. It has been repeatedly held, in the application of this well-settled distinction, that the establishment and maintenance of a system of water supply in part for the use of inhabitants who pay for the necessity thus supplied is a commercial venture, and that for negligence in connection therewith the city or town is liable as a private corporation would be in performing a similar service. *Hand v. Brookline*, 126 Mass. 324; *Perkins v. Lawrence*, 136 Mass. 305; *Stoddard v. Winchester*, 157 Mass. 567, 32 N. E. 948; *Fox v. Chelsea* 171 Mass. 297, 50 N. E. 622; *Johnson v. Worcester*, 172 Mass. 122, 51 N. E. 519; *Lynch v. Springfield*, 174 Mass. 430, 54 N. E. 871; *Kelly v. Winthrop*, 107 N. E. 414; *Murray v. Boston*, 107 N. E. 416."

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# Rate Research

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CONTENTS	Page
STANDARDIZATION RULES OF THE A. I. E. E.	307
COMMISSION DECISIONS.....	308
New York.....	308
California.....	310
Wisconsin.....	312
Missouri.....	313
Compilation of Rules and Regulations in Re Customer's Deposits ..	313
REFERENCES.....	318
Investment and Return.....	318
Municipalities.....	319
General.....	319



# Rate Research

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Vol. 6

CHICAGO, FEBRUARY 11, 1915

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## STANDARDIZATION RULES OF THE A. I. E. E.

### DEFINITIONS AFFECTING RATES

#### 731—Electric Definitions.

STANDARDIZATION RULES of the A. I. E. E. Effective December 1, 1914. Pamphlet 96 pages.

The following are a number of the rules which give definitions affecting rates:

“**Power Factor** is the ratio of the power to the volt-amperes. In the case of sinusoidal current and voltage, the power factor is equal to the cosine of their difference in phase.

“**The Load Factor** of a machine, plant or system is the ratio of the average power to the maximum power during a certain period of time. The average power is taken over a certain period of time such as a day, a month, or a year, and the maximum is taken over a short interval of the maximum load within that period.

“In each case, the interval of maximum load and the period over which the average is taken should be definitely specified, such as a ‘half-hour monthly’ load-factor. The proper interval and period are usually dependent upon local conditions and upon the purpose for which the load is to be used.

“**Plant Factor** is the ratio of the average load to the rated capacity of the power plant.

“**The Demand** of an installation or system is the load which it puts on the source of supply, as measured at the receiving terminals. The demand may be as specified, contracted for, or used. It may be expressed either in kilowatts, kilovolt-amperes, amperes or other suitable units.

**"Maximum Demand** of an installation or system is its greatest demand, as measured not instantaneously but over a suitable and specified interval, such as a 'five-minute maximum demand.'

**"Demand Factor** is the ratio of the maximum demand of any system or part of a system to the total connected load of the system, or of the part of system, under consideration.

**"Diversity Factor** is the ratio of the sum of the maximum power demands of the subdivisions of any system or parts of a system to the maximum demand of the whole system or of the part of the system under consideration, measured at the point of supply.

**"Connected Load.** The combined continuous rating of all the receiving apparatus on consumers' premises connected to the system or part of the system under consideration.

**"Capacity.** The two different senses in which this word is used sometimes lead to ambiguity. It is therefore recommended that whenever such ambiguity is likely to arise, the descriptive term *power capacity* or *current capacity* be used, when referring to the power or current which a device can safely carry, and that the term '*Capacitance*' be used when referring to the electrostatic capacity of a device."

## COMMISSION DECISIONS

### NEW YORK

#### 713—Filing of Schedules

REGULATION GOVERNING THE FILING OF CONTRACTS AND PRESCRIBING THE FORM AND GOVERNING THE FILING AND PUBLICATION OF RATE SCHEDULES OF GAS AND ELECTRICAL CORPORATIONS, AND MUNICIPALITIES, Prescribed by Order of the NEW YORK PUBLIC SERVICE COMMISSION, (2D) December 29, 1914.

The Commission has issued an order requiring every gas and electric corporation and municipality to file with the Commission and furnish and keep open to public inspection, schedules showing all rates and charges, all forms of contracts and agreements, and all rules and regulations relating to rates, charges, or service of such companies. The order also prescribes the form of every such schedule, and specifies in detail the manner and method to be used in preparing, publishing and filing complete schedules and subsequent amendments to rates or regulations.

The original order required the companies to comply with the order on or before February 15, 1915, but this date was subsequently changed to March 15, 1915.

The data filed with the Commission are to show all rates and charges made, established or enforced, or to be charged or enforced, and all rules and regulations relating to rates, charges or service used or to be used, and all general privileges and facilities granted or allowed applying generally throughout the territory served by such gas corporations, electrical corporations, or municipalities; a certified copy of each and every contract with street or other railroad corporations, and other gas corporations or electrical corporations, covering the furnishing of gas or electricity primarily for the propulsion, lighting, and heating of cars and for re-sale, in effect and in force on said date, or which have been entered into to become effective and enforced subsequent thereto, and any such contract entered into or in effect after said date shall be filed with the Commission within five days from the date of its execution; and a certified copy of each and every contract for special service for particular occasions covering a limited period of time not exceeding twenty consecutive days for such occasion.

Any schedule issued which does not conform to the regulations prescribed is subject to rejection by the Commission when tendered for filing.

The loose leaf plan is to be used so that changes may be made easily. The order as first issued by the Commission required all schedules to be printed, but later the order was changed to permit typewritten schedules to be filed.

The order provides, in part, as follows:

“Every schedule shall show on the rules and regulations leaves all the rules which apply generally to the furnishing of gas or electricity as the case may be, and all the regulations, special clauses, or riders which in any way relate generally or specifically to service rendered or to be rendered, or any privilege or facility granted or allowed under any service classification provided in the schedule. . . .

“The leaves on which the definitions of terms and explanations of abbreviations and reference marks used in the schedule are given shall show all the technical terms, abbreviations, and reference marks used in the schedule, with definition of each such term and full explanation of each such abbreviation and reference mark. When ratings are used, based on capacity of installation or a percentage thereof, a table of equivalents for estimating such ratings must be given.

“Service classification leaves shall show for each classification—

“(a) Classification number.

“(b) Whether for fuel, lighting, or power, or a combination of any two or all.

“(c) Class of consumer to whom available, according to purpose of use or location in service area, or both, as the case may be.

“(d) Character of service, description (continuous, limited-period, optional, auxiliary and emergency).

“(e) Guarantee: The amount, if any, is required, and on what it is based; also show hereunder the amount of minimum charge, if any is required.

“(f) Rate: The base or unit rate or rates or series of unit rates used in compiling the total charge to consumer. When a system of discounts from a base rate is used instead of a series of unit rates such discounts must here be shown. Such discounts should not, however, be confused with maintenance or prompt payment discounts.

“(g) Maintenance Discounts: If any discounts or reductions in unit rates are allowed in consideration of the consumer paying for lamp renewals or other maintenance charges, such discounts or reductions must be given, with a clear explanation of the conditions under which they are allowed.

“(h) Prompt Payment Discounts: Give the regulation governing when allowances in the prices charged are made in consideration of the time within which bills are paid.

“(i) Such rules and regulations, special clauses, or riders as may apply thereto.

“NOTE: As all rules and regulations, special clauses, or riders are required to be shown, with specific number or letter, on the rules and regulations leaves, any rule, etc., may be made a part of any service, classification by giving reference thereto by its number or letter; but any special rule or regulation applying to a particular classification must be shown in full in connection therewith.”

All proposed changes in the schedules are to be filed with the Commission thirty days prior to the date effective. Provision is made for putting in effect of a new rate on less than statutory notice, but the Commission says:

“This authority will be exercised only in cases where actual emergency or real merit is shown, but in no case to permit changes which effect increases in rates or charges, or which in any way operate to decrease the value of the service to consumers.”

## CALIFORNIA

### 226.2—Extension of Service.

COLONY HOLDING CORPORATION VS. COALINGA WATER AND ELECTRIC COMPANY et al., Asking that the Defendant Company be Ordered to

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Extend its Lines to Serve Complainant. Decision of the CALIFORNIA RAILROAD COMMISSION, Ordering the Extension, Subject to Certain Conditions. December 30, 1914.

The defendant Company refused to extend its lines to render service desired by the complainant unless the complainant would sign a three year contract for the service at established rates. The complainant refused to sign the contract for the specified term which defendant later offered to reduce to a term of one year. The objection to a term contract is based upon the belief that defendant's present rates are in excess of what the cost would be to complainant to generate and distribute the electric energy which it will require. The service is of a temporary nature and the cost of the necessary extension is estimated at \$850.00. The Commission says:

"Without passing upon the reasonableness of defendant's present rates regarding which the Commission has at this time no information, it may be assumed for the purpose of this case that the minimum rate of  $1\frac{1}{2}$  cents per kilowatt hour represents the cost of energy to be delivered to complainant and that the excess of  $4\frac{1}{2}$  cents per kilowatt hour over this minimum rate provided for in the first block of the schedule applicable to this service, together with the excess due to the minimum charge of \$1.00 per month per horsepower of maximum demand, should apply on the cost of the service line to serve complainant.

"In view of all the facts I find that complainant is entitled to receive service from defendant and that defendant should at once proceed to construct the necessary service line and furnish such service to complainant's brick plant under either of the following conditions:

"*First.* (a) That complainant shall advance to defendant the estimated cost of the service line, which cost has been referred to as \$850.00, upon which sum defendant shall pay complainant interest at the rate of six per cent. (6%) per annum.

"(b) That the sum so advanced by complainant shall be refunded by defendant at the end of three years from the date when service connection is first made with complainant's brick plant; provided, that all sums due defendant for service supplied to complainant's brick plant have been paid; and provided, further, that service has not been discontinued during said three year period at complainant's request.

"(c) That in the event complainant requests defendant to discontinue service before the expiration of said three year period, then defendant shall pay to complainant, in lieu of the entire sum advanced by it to cover the cost of the extension, a sum equal to the difference between the total of all sums theretofore paid, plus all sums then owing and unpaid by complainant to defendant for electric service supplied by defendant to complainant's brick plant and what complainant's total payment would have been at a uniform rate of

1½ cents per kilowatt hour; provided, that the maximum sum so refunded shall not exceed the amount of the original advance payment made by complainant.

“(d) That complainant shall give written notice to defendant of its desire to discontinue service at least thirty days prior to the date when such service is to be discontinued.

“*Second.* (a) That complainant shall, by proper guarantee or in such other manner as may be satisfactory to defendant, insure defendant against loss in the sum of \$850.00 for a period of three years from the date when service connection is first made with complainant’s said brick plant.

“(b) That, in the event complainant requests defendant to discontinue service before the expiration of said three year period, then complainant shall pay to defendant, in addition to all sums theretofore paid and then owing and unpaid on account of electric service furnished by defendant, a further sum equal to \$850.00, less the difference between actual total amount paid for service, as above stated, and what complainant’s total payment for service would have been at a uniform rate of 1½ cents per kilowatt hour; provided, that the maximum additional sum so paid by complainant shall not exceed \$850.00.

“(c) That the complainant shall give written notice to defendant of its desire to discontinue service at least thirty days prior to the time when such service is to be discontinued.”

## WISCONSIN

### 132—Protection From Competition.

Application of the MILWAUKEE LIGHT, HEAT AND TRACTION COMPANY, For a Certificate of Public Convenience and Necessity for a Second Public Utility in Delafield. Decision of the WISCONSIN RAILROAD COMMISSION, Granting the Application. December 22, 1914.

Electric service during lighting hours is furnished the village of Delafield by E. Humphrey. Many persons desire current for power and other purposes requiring continuous service. The present operator asserts that he cannot increase his equipment so as to furnish continuous service upon the revenue which would be available from the additional service. The Commission says:

“In view of this fact and the further fact that the applicant is ready and willing to furnish continuous service at reasonable rates, we do not feel that the residents of Delafield should be deprived of such service.

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“A certificate of public convenience and necessity will therefore be granted to the applicant.”

### **MISSOURI**

#### **253—Commission Reports of Decisions.**

THE MISSOURI PUBLIC SERVICE COMMISSION REPORTS. Volume I, 777 pages, including index.

The Missouri Commission has issued its first bound volume of decisions. The Volume contains all decisions rendered during the period from April 15, 1913, to September 24, 1914.

### **COMMISSION DECISIONS**

#### **COMPILATION OF RULES AND REGULATIONS IN RE CUSTOMER'S DEPOSITS.**

Continued from 6 RATE RESEARCH 298

### **WISCONSIN**

(1) Berend v. Wisconsin Telephone Company case, begun in 6 RATE RESEARCH 300.

“In Owensboro Gaslight Co. v. Hildebrand, 42 S. W. 351, it is said:

“ ‘In these cases the companies undertook to compel the appellee to deposit the sum of \$20.00 as security for his future consumption of gas and electricity, and, upon his refusal to do so, withdrew their pipes and wires from his building \*\*\*. It is conceded by appellee that appellant may prescribe reasonable rules and regulations, and impose reasonable conditions upon the consumer, and require proper security for the payment of their bills, and may even require deposits in advance; but his contention here is that the companies have adopted no such rule or regulation as they have attempted to enforce against him, and such appears to us to be a fact.’

“In Williams v. The Mutual Gas Co. 52 Mich. 499, 503, the company required a consumer who used about \$60 worth of gas per week to deposit with the company the sum of \$100 as security for the payment of the gas to be consumed by him. The court sustained the requirement and in so doing said:

“ ‘If the defendant \* \* \* required the plaintiff to give sufficient security that he would make such payment and perform such con-

ditions, before making such service, I think it would have been reasonable, but in the place of such security the defendant demanded a deposit of money with the company, as had been its custom. This the company had a right to do. The condition was a reasonable one.'

'In *Buffalo County Telephone Co. v. Turner*, 118 N. W. 1064; 19 L. R. A. (N. S.) 693, it was held that a rule of a rural telephone company, that telephone rent must be paid for a period of six months in advance, is reasonable; and that a subscriber refusing to comply therewith may be denied service by the company.

'To the same effect see *Malochee v. Great Southern Teleph. and Teleg. Co.* 49 La. Ann. 1690.

'In *Rushville Co-Op. Teleph. Co. v. Irvin* 27, Ind. App. 62, affirmed by the Supreme Court, 161 Ind. 524, it was held that a rule of a telephone company requiring payment monthly for a telephone service on a specified day succeeding the maturity of the indebtedness, and that on failure thus to pay the services was to be discontinued, was a reasonable regulation. The court said:

“ ‘It cannot be denied that a rule of the company requiring these monthly payments to be made in advance would have been a reasonable rule, and that upon refusal so to pay service could be denied. The company must protect its plant and keep up its efficiency, and may enforce a rule that insures a reasonable revenue and its prompt receipt. It can maintain an efficient service only through prompt payment of its dues and tolls, and because of that fact it may use the summary remedy of denying service for non-payment. It cannot be said it may be denied the benefit of this rule because a patron claims the company is indebted to him \* \* \*. Keeping in view the nature of the company's duties, and the services it may be compelled to render, it must be held that the company may enforce the payment of its current dues and tolls by the summary remedy of denying service regardless of the fact that the subscriber claims the company is indebted to him.’

'In *Harbison v. Knoxville Water Co.* 53 S. W. 993, 996, it was held that a water company's rule, that consumers shall pay three months in advance for water supply is reasonable. Commenting upon the right of the company to make such requirement the court says:

“ ‘Such a regulation for the sale of its water furnished through hydrants, where the quantity used cannot be or is not measured, is essential to protect the rights and safety of the company, and may be necessary to enable it to meet its obligations to the public, and its duty to furnish water to all inhabitants of the city alike and without discrimination. In determining the reasonableness or unreasonableness of a rule adopted by a water company chartered to supply a city and its people with water, we must necessarily take



into consideration its relation to the city, and its compacted population and the various elements composing such a population. It has no right to base a rule on the theory that the population, as a whole, is dishonest. But it has the right to adopt a rule which, while giving the honest citizen what he pays for, will prevent the dishonest from getting what he never paid for, and never intended to pay for, and said he never wanted.'

"In *Cedar Rapids Gaslight Co. v. Cedar Rapids*, 120 N. W. 966, 971, 972, the court says:

" 'The company may not base a rule on the theory that the people as a whole, are dishonest, but it has the right to adopt a rule which, while giving the honest citizen what he pays for, will prevent the dishonest from getting that which he will never pay for \* \* \* .

That the company may establish a rule exacting payment in advance in reasonable amounts, or the deposit of security, at least is fully settled by the authorities, and it would seem that the requirement of security or deposit of money in advance would be quite as effective in enforcing prompt payments and more so in avoiding bad debts than an increase in price upon failure to pay by a time stated, and it does not appear that collecting through such method or some other reasonable method that may be derived not obnoxious to the ordinance would entail greater expense on the company than under that of allowing discounts.'

"In some instances companies grant a discount of a certain per cent. if the bill rendered is paid on or before a given day, and in other instances the reverse of this rule is applied, by adding a certain per cent to the bill if the same is not paid by a certain day. In *Tacoma Hotel Co. v. Tacoma Light & Water Co.* 3 Wash. 316, 325, a rule of a water company requiring water rates to be paid quarterly, adding a penalty of 5 per cent in case of default in payment for ten days, and providing that, after default for fifteen days, the water should be shut off from the premises, was held to be a reasonable regulation and enforceable against consumers. The court says:

" 'The condition imposed, that the company might refuse to furnish water to an applicant refusing to pay for it a sum due for water furnished thereunder, is in one sense a security for the payment thereof. Instead of forming an estimate of the water that would likely be used, and requiring a deposit in advance of a sufficient sum of money to cover the same, or requiring other security for the payment thereof, the water company provides that at stated periods payments shall be made in order that a large sum may not accumulate, it being willing to take its chances for a stated time without other security; surely this is more lenient than either to demand a bond or other security, or a deposit of a sum of money in advance large enough to be reasonably certain of covering the sum that should become due.'

"A similar provision was involved in *Dayton v. Quigley*, 29 N. J. Eq. 77.

"It seems to be well settled that for failure or refusal to comply with the rules and regulations of a public utility a consumer's service may be discontinued. 27 Am. & Eng. Ency. of Law (2nd Ed.) 1040; 14 Am. & Eng. of Law (2nd Ed.) 931; Thornton on Law relating to Oil & Gas, sec. 547; 30 Am. & Eng. Ency. of Law (2nd Ed.), 419; 51 Cent. L. J. 131-133; 27 Am. Law. Reg. (N. S.) 277.

"From the authorities above quoted the following rules for the protection of a public utility against loss of operating revenues because of uncollectible accounts, and for the securing of the prompt receipt of all moneys due for services performed or product furnished, may be deduced as reasonable regulations which may be lawfully prescribed and enforced by a public utility:

"1. 'It may require of any patron the deposit of a reasonable sum of money as security for the prompt payment of bills when due. In determining the reasonableness of the amount thus to be deposited, the probable amount of the indebtedness that may be incurred during the month or other stated period at the end of which bills are made out and rendered, is an important factor. No more than a sum sufficient to furnish adequate security for the credit extended may be legally exacted.

"2. It may require satisfactory security to be furnished in lieu of such deposit.

"3. It may allow a discount upon bills paid on or before a stated day, or exact a penalty for failure to make payment within a certain time.

"4. For neglect or refusal on the part of any patron to comply with any of the legal rules and regulations established, it may discontinue service to such patron.

"It is therefore clear that the respondent's rule here in question is a reasonable regulation, and having been duly published and filed, as required by law, is binding upon the company as well as upon the public. The fact that the petitioner offered to give a bond as security for telephone rentals is immaterial. There is no provision in the rules of the company prescribing such security and the company could not, therefore, have accepted such offer, if it had chosen to do so, without violating the statute. The giving of such security might be a convenient and desirable alternative in certain instances to making a deposit of money, and the rules of many companies so provide. Unless there is some practicable objection to the policy, which is not apparent to us at present, we suggest that the company modify its rule so as to permit it to accept satisfactory and reliable security in place of a money deposit whenever it seems prudent to do so."

(Berend v. Wisconsin Telephone Company, 1909, 4 W. R. C. R., 150, 155-160).

(2) The Commission made an investigation of the rates, rules and regulations of the LaCrosse Gas and Electric Company, and the following rule was left unchanged:

“Application for gas or electric service must be made at the office before using either, or such user may be held liable for any unpaid bills due from a former user, and the company may require the deposit of a sum of money to secure itself against loss.”

(In Re Appl. La Crosse Gas and Electric Co., 8 W. R. C. R. 138, 145).

(3) The Commission, on its own motion, investigated the refusal of the Farmers' Union Tel. Co. to continue its service to William Lemcke at his residence near Middleton, Dane County. Mr. Lemcke made deductions from bills rendered him for service on account of materials and labor furnished by him at the time his telephone was installed. The company refused to accept the sums offered as full payment and partially discontinued its service. The Commission said:

“Should a disagreement arise as to the contractual relations involving the payment of rentals or the payment of any indebtedness owing by the company to a subscriber, the rights of the parties can be adjusted in court.

“It is the duty of a public utility to establish rules and regulations having for their purpose the enforcement of prompt payment of all accounts due for services when rendered. This matter was fully considered by the Commission in the case of Berend v. Wis. Tel. Co. 1909, 4 W. R. C. R. 150, 159.\*\*\*

“In the present case the company has not established any rule for the enforcement of prompt payment of rentals. However, in the absence of such rule it could not be compelled to furnish to a subscriber service free of charge, for that would be a violation of the statute quoted. Consequently, when a patron refuses to pay the full amount of rental at the end of the period when the rental becomes due, the company should discontinue his service. In this case the company, in the absence of any rule protecting it against loss of revenue from the refusal of patrons to meet their obligations, discontinued complainant's service when he refused to pay the bill in full, and its act in the premises cannot be questioned.

“Notwithstanding the discontinuance of the service the complainant now appears in the position of a new subscriber and asks that service be given him. The question before the Commission, therefore, is whether a telephone company has the right to refuse service on the ground that previous bills have not been fully paid. A telephone company as has been shown, may, by establishing proper rules, require its patrons to pay in advance for a reasonable period for the desired service, and if a patron who is in arrears to the company offers payment in advance for future service, we do not think that it is consistent with its public duty for the company to refuse such

service. The rule is stated in 1. Wyman on Public Service Corporations, 451, as follows:

“ ‘As one in public service may always demand prepayment, having given credit, the company must be content as other creditors must be to collect its back bills by legal means. To attempt to make such collections by refusing present service for ready money would seem to be in the face of the public duty.’ ”

“In the instant case the president of the telephone company testified that the service was discontinued because the complainant deducted \$2.70 from the bill rendered him in 1913 and refused to pay more than \$9.30 for previous service, the full charges for which were \$12.00. If the complainant was ready and willing to secure the company the full amount of \$12.00 for its succeeding year's service, then, in our judgment, the previous indebtedness was not an excuse absolving the company from its duty to supply the service. The company should at once publish and file with the Commission a rule covering the subject in controversy.

“It is Therefore Ordered, That the Farmers' Union Telephone Company restore its telephone service to William Lemcke upon the tender by him of payment in advance for a reasonable period at the rates now charged, or the deposit by him with the company of a sufficient sum of money to secure the prompt payment of rentals which may become due in the future for services rendered in accordance with such rules and regulations as the company may publish and file with the Commission.” (In re Refusal Farmers' Union Tel. Co. to Furnish Service, 1913. 13 W. R. C. R. 399, 401-402).

(To be continued)

## REFERENCES

### INVESTMENT AND RETURN

#### 380—Taxation.

INCREASED TAXATION OF PUBLIC UTILITIES, by EDWIN GRUHL. 2 pages, *Gas Age*, February 1, 1915, p. 119.

Taxes on the property of public service corporations in Wisconsin have greatly increased during the past few years and the writer states that the customers of such utilities upon whom the burden of increased taxation ultimately falls have abundant cause for complaint. The taxing of public utility property is a means of indirect taxation which can be collected with less opposition from the public than if directly collected from the tax payers. The tax laws in Wisconsin and their

administration are briefly commented upon; and the taxing of intangible values, and franchise value, and the basis of valuation for taxation purposes and for rate making purposes are discussed.

## MUNICIPALITIES

### 800—Municipalities.

PUBLIC POLICIES AS TO MUNICIPAL UTILITIES. *Annals of the American Academy of Political and Social Science*, Volume 57, No. 146. January, 1915, 357 pages.

The proceedings of the Conference of American Mayors, November 12 to 14, 1914, are printed in this volume, including all the papers presented at that conference. The papers are classified under the headings (1) Practical Utility Problems; (2) The Regulation of Utilities; (3) Local and State Regulation of Municipal Utilities; (4) Municipal Ownership and Operation; (5) Holding Companies and the Public Welfare. The following is a list of a number of the papers contained in the volume which will give an idea of the scope and importance of the subjects covered:

	Page
Fundamental Planks in a Public Utility Program, by Delos F. Wilcox . . . . .	8
The Regulation of Municipal Utilities, by Nathaniel T. Guernsey . . . . .	20
Municipal Lighting Rates, by Ray Palmer . . . . .	33
Interlocking Directorates, by Louis D. Brandeis . . . . .	45
Remarks of Presiding Officer: "The Regulation of Public Utilities," by Carter H. Harrison . . . . .	54
A Constructive Policy for Public Service Corporations, by Charles Day . . . . .	83
What Regulation Must Accomplish If It Is To Be Permanent, by John M. Eshleman . . . . .	94
The Advantages of State Regulation, by Halford Erickson . . . . .	123
The Distribution of Functions Between Local and State Regulation, by Milo R. Maltbie . . . . .	163
The Case for Home Rule, by Charles E. Merriam . . . . .	170
Municipal Ownership—The Testimony of Foreign Experience, by Frederic C. Howe . . . . .	194
Some Limitations and Objections to Municipal Ownership, by Clarke M. Rosecrantz . . . . .	254
The Utilities Bureau, by Felix Frankfurter . . . . .	293
Holding Companies and The Public Welfare, by Charles F. Mathewson . . . . .	305
Public Advantages of Holding Companies, by Francis T. Homer . . . . .	313
The Public Welfare and the Holding Company, by James P. Goodrich . . . . .	323

## GENERAL

### 113—Financing.

FINANCING OF PUBLIC UTILITY PROPERTIES, by ANDREW COOKE. Paper Read Before the Seventh Annual Convention of the Wisconsin Electrical Association at Milwaukee, January 21, 1915.

The writer asserts that state regulation and the present attitude of the public toward public utilities have made financing of such utilities difficult. There has

been no constructive financing of any consequence by public utility corporations for two or three years before the European War commenced, and the financial difficulties of all corporations have been greatly increased by the conditions brought about by the present war. The large and strong companies have been borrowing money at high rates to meet their pressing obligations, but the small and weaker companies have in many cases not been able to borrow money at all. It is pointed out that restrictive legislation in one state or the administration of public utility laws by a state commission in such a manner as to subject the companies to severe regulation and limit them to insufficient returns without furnishing proper protection from competition, affects the financing of these undertakings, not only in that state but in all states, since it is possible that at any time the policy of that state may be adopted elsewhere. Companies are urged to work for a better understanding of public utility problems by the public. A public sentiment should be created that will secure sane and constructive public utility legislation.

### **900—General.**

THE PRESIDENT, THE NEWSPAPERS AND THE ASSOCIATION. 5 pages, *Electric Railway Journal*, February 6, 1915, p. 275.

The address of President Woodrow Wilson before the mid-year meeting of the A. E. R. A. is published in full. The President discussed the relations existing between business and the public, from a standpoint of government regulation of business. He states that it is the aim of the Government to afford all business the liberty which is expressed in the sporting world in the phrase "a free field and no favor." What he calls "the rules of the game" are, in brief, as follows: First of all is the rule of publicity. The public should be permitted to see business as it is and judge of it accordingly. There are a great many businesses in this country that have fallen under suspicion because they were so secretive. The second rule requires the giving of a full equivalent in service for the money received and this is the solid foundation for any business. In the third place, it is pointed out that companies are employees of the public and clear, clean consciences toward employers are the basis of success. The fourth rule is the rule of service. The spirit of service leads you to see to it that the thing that you do for the public and get money for is the best thing of that kind that can be done. The President states that business should not be apprehensive of government interference but should enjoy a new era of confidence.

A number of editorials from leading newspapers in different parts of the country commenting upon the President's statement of administration policy are also given.

### **910—Promotion and Growth of Business.**

AN ANALYSIS OF CENTRAL-STATION PRACTICE IN WISCONSIN REGARDING RURAL SERVICE, *Electrical Review and Western Electrician*, February 6, 1915, p. 237.

An analysis of conditions in Wisconsin as regards the use of electricity on the farm, is presented in tabulated form. The data are taken from a report recently compiled by a committee of the Wisconsin Electrical Association under the direction of W. E. Haseltine, manager of the Ripon Light and Water Company. The information covers 23 central stations of the state which are furnishing service to rural customers.

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
RATES .....		323
FAMOUS RATE PAPERS—No. 6 .....		323
Effect of Width of	Maximum Demand on Rate Making .....	323
COMMISSION DECISIONS .....		327
California .....		327
District of Columbia .....		329
Compilation of Rules and Regulations in Re	Customer's Deposits ..	329
REFERENCES .....		333
Rates .....		333
Investment and Return .....		334
Municipalities .....		335
General .....		335
Court Decision References .....		336



# Rate Research

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Vol. 6

CHICAGO, FEBRUARY 18, 1915

No. 21

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### FAMOUS RATE PAPERS—No. 6

#### EFFECT OF WIDTH OF MAXIMUM DEMAND ON RATE MAKING.

By LOUIS A. FERGUSON. Paper read at the Twenty-Seventh Annual Meeting of the Association of Edison Illuminating Companies, Spring Lake, New Jersey, September 19 to 21, 1911.

(NOTE—Paragraph headings are not in original)

##### 521.1—Width

“The possibility of the large prospective consumer installing his own isolated plant does not seem to completely down, and it is, therefore highly important that schedules for the supply of large business should be carefully prepared to meet competitive conditions which are being continually presented. These schedules should take into consideration the hour's use or load factor of the business, as most of us appreciate, otherwise the Central Station will obtain the unprofitable short-hour business and lose that most to be desired long-hour profitable business.

##### 611.5—Wholesale

“The wholesale rate schedule should differentiate as to quantity, load factor, power factor where practicable, and even as to the kind of supply, whether alternating or direct current or whether high or low tension, and because of the comparatively small number of such consumers and their large size, it is permissible that the schedule be somewhat more complicated than the retail schedule.

**522—Actual Measurement of Demand**

"This paper will deal more particularly with the subject of the proper method of measuring the maximum demand from which the load factor of these larger or wholesale consumers is determined.

**621.1—Load Factor**

"Until very recently there has been much confusion in regard to the term 'Load Factor.' Even to-day, after years of discussion, and with a fairly good general understanding of the authoritative definition of load factor, there is still much uncertainty, unless explanatory statements are added. Load factor is based on two quantities: (a) the average kilowatt hours per hour consumed or generated in a given number of consecutive hours, as, for instance, in a 10-hour day, a 24-hour day, a month or a year; and, (b) the maximum demand during the corresponding period.

"It is now more generally appreciated that in rate making at least the yearly load factor is the only proper one to consider, because fixed charges on investment are usually the most important items of cost and these fixed charges continue every hour in the entire year. The yearly load factor is for this reason coming into general use and in the absence of any qualifying statement, the yearly load factor would be understood.

**520—Determination of Demand**

"The exact meaning of maximum demand or the second quantity, (b) would not be generally understood if not specified, especially in connection with the sale of alternating current energy. As pointed out at last year's Convention by Mr. R. S. Hale, in his paper on 'Measuring Demand,' several methods are in use for determining the maximum demand. These are: *First*. The so-called 'non-instrumental methods,' which should apply to all small lighting consumers; and, *Second*. The 'instrumental methods' which should be applied to all large consumers.

"Small consumers in this statement refer to those having a maximum demand not exceeding one or possibly two kilowatts and which, therefore, includes 95 per cent or more of the residential consumers in a large city. Large consumers in the foregoing statement, refer to those having a maximum demand in excess of 30 or 40 kilowatts. In the latter case, the actual demand is by far the most important factor in the cost of supplying such consumer and must, therefore, be determined accurately and continuously.

**522—Actual Measurement of Demand**

"The principal methods are as follows: (1) the momentary swings of an indicating or graphic recording instrument; (2) the current required to produce a given heating effect, as in a Wright demand indicator; (3) the watthour consumption or integrated demand during a specified interval of time, as one minute, five minutes,

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fifteen minutes, half hour or one hour. The last mentioned method is now being used almost exclusively in the measurement of alternating current energy, but there is still a great divergence of practice as to the interval of time and also as to whether the maximum demand charge is based on the highest individual peak or on an average of several peaks, and if so, how many.

#### **521.1—Width**

“This is extremely unfortunate and often puts the Central Station Company at a disadvantage, especially when dealing with large consumers or allied industries, who operate in several cities and in which cities the prevailing practice as to interval taken in determining maximum demand may be very different. The following will, therefore, be confined largely to a consideration of most desirable intervals.

#### **522.1—Maximum Demand Indicators**

“The Wright demand indicator installation, used by several of the large companies, answers very well for direct current installations of moderate size, but is found rather expensive for very large D. C. installations and unsatisfactory for alternating current, because of the large rushes of current in the starting of A. C. motors. In direct current installations, for instance, the Wright demand indicators will, under most conditions, indicate about 85 per cent. of the maximum in 5 minutes, and the full maximum in 30 minutes. As this indicator has found rather wide application in several cities, the interval (one-half hour with a steady load) required to show the full maximum on this instrument, naturally had some influence in fixing the width of peak over which the maximum was integrated in the sale of alternating current power.

#### **521.1—Width**

“It must be borne in mind, that with a steady load, there is no difference between a 5-minute and a one hour peak. If the load is intermittent, the shorter interval will give the higher maximum demand. In making a schedule of rates for large consumers, it is necessary, therefore, if the rate is to be a just one for all the users in a given class, that a fixed interval for maximum demand be established; that is, either the instantaneous, the one minute, the five minute, quarter hour, half hour, or the one hour.

“If the entire output of a water power plant with long transmission lines is taken by a very few consumers, each taking large blocks of power, a short interval might be preferable. In such cases it is also sometimes desirable to increase the charge to the consumer, if the power factor of his load falls below a reasonable figure.

**623—Power Factor**

"In such portions of our large cities, however, as are supplied by alternating current energy, the maximum load almost invariably occurs between six and nine o'clock, when it is almost exclusively lighting, and as a result, the power factor is high at that time in the evening. The day load or motor load in above mentioned portions of these cities, which naturally has a poor power factor, is usually less than one-half of the evening load. The amount of copper in the distribution system is therefore, not injuriously affected by the poor load factor in the day time, and hence the cost to the central station company is not appreciably affected. Moreover, rotary condensers may be used in such particular substations where the power factor is lower than desirable, thus insuring a high power factor on the generators, transmission lines and substations, and then in the worst event only the distribution system would be affected. In dealing with large numbers of power consumers it is difficult enough to have them understand load factor, to say nothing of such a complicated matter as an equitable charge for low power factor. For these reasons the Central station companies operating in large cities practically always charge for the maximum demand on the basis of true energy or watt-hour consumption, and will also find many advantages in using a reasonably long interval.

**521.1—Width**

"In order to separate more easily the relative advantages of short and long intervals in obtaining the maximum demand, it is well to consider a simple example—the sight reading of the dial of ordinary watt-hour meter by an observer. There are immediately apparent two causes of error: (1) the time of observation of the length of interval, and, (2) the value of the reading. Suppose the operator is allowed a leeway of ten seconds on either side of the exact time. The maximum error in five minutes would be approximately 6 per cent., while in one hour it would be less than 6–10 of 1 per cent. In the second place, assume that the meter has a constant of 1, is read directly in K. W. H. and is installed on a line using about 1 K. W. H. per minute. If the observer is allowed to interpolate to one-quarter of each division then there is a maximum possible error of  $\frac{1}{4}$  K. W. H. In five minutes, this would introduce an error of 5 per cent., but in one hour only 4–10 of 1 per cent. The above illustration assumes a meter constant of one, and the percentage of error given should be increased correspondingly by the larger constant always necessary for a large consumer.

"Another illustration of the advantage of using longer intervals is an actual case in which power was sold to a large street railway system and metered on a number of transmission lines each delivering a coincident maximum demand of about 1800 kw. Originally one division of the lowest dial of the meter multiplied by the constant

of the meter best fitted for the purpose which was on the market at that time was something like 400 kw. This meant a maximum possible error of say 400 kw., which would have been prohibitive, except that there were several lines used in the supply and also the average of several maxima was used. But even then the results were, of course, not satisfactory.

"On the meters now in use by the same company on the very large number of railway lines delivering an aggregate of over 100,000 kilowatts, one division of the first dial amounts to  $1/100$  kw., which, multiplied by the constant which is usually 4000, gives the value of the lowest division of the dial as 40 kw. The hourly reading is 40 kw. divided by 1800 kw. (the output for one hour) or a maximum possible error of 2.2 per cent. With a half-hour interval the error is the same, but the percentage is double—40 kw. divided by 900 kw., or 4.4 per cent. Similarly the quarter-hour error would be 8.8 per cent. and the five minute error 26.6 per cent.

"In the railway business cited, hourly intervals are used and this possible error is reduced by using the average of several maxima. The maximum error of each hourly reading is 2.2 per cent. Taking the average of several cases, the error, according to the law of averages, would be only one-half of this, or 1.1 per cent., and the more we can average within practical limits, the more this percentage of error will be reduced. For instance, using the average of six peaks would theoretically reduce the error of 2.2 per cent. to .37 of 1 per cent.

"The error in reading any integrating meter used in determining the maximum demand (and this error as shown above may be very large), would be a much smaller percentage of the total energy for a long period than for a short one; in fact, the error is inversely proportional to the interval.

(To be continued)

## **COMMISSION DECISIONS**

### **CALIFORNIA**

#### **132—Protection from Competition.**

MT. KONOCTI LIGHT AND POWER CORPORATION VS. JAMES A. GUNN, JR., Asking That the Defendant Be Compelled to Withdraw From Territories Served By the Petitioner. Decision of the CALIFORNIA RAILROAD COMMISSION, Directing Defendant to Withdraw From the Territories in Question. December 30, 1914.

The complainant, operating an electric distributing system, contends that the defendant invaded territory served by complainant, and petitions the Commission to compel defendant to withdraw from such

territory and to discontinue the construction of its distributing system serving the village of Finley. From the evidence introduced it appears that defendant had erected certain electrical equipment in the territory in question, but had not begun to render service until practically two years after the complainant had begun actual operation. Other facts in the case and the Commission's findings are given in the following quotation from the case.

"Under the circumstances there can be no question but that complainant was actually serving the public in the territory involved in this case with electric energy for more than one year prior to the time when defendant completed his line to Finley and for about six months before defendant was prepared to serve the public with electric energy at any point in Lake County or elsewhere. The mere fact that defendant began the construction of his plant believing that he could build his lines indiscriminately throughout Lake County does not justify needless duplication of equipment and other evils of unwarranted competition, nor can the fact that defendant may have erected a few poles here and there be construed as giving him any prior or additional right to serve in a territory from which he would otherwise be excluded. \* \* \*

"Defendant's contention that, because he procured a franchise from the board of supervisors of Lake County to construct and maintain electric power lines over and along the public roads of that county prior to the effective date of the Public Utilities Act, he should be permitted to construct his lines in any portion of the county, including the territory served by another public utility, is wholly untenable, and defendant's claim that by merely erecting a few isolated poles and several hundred feet of wire in the village of Finley he had begun to serve that territory, within the meaning of the Public Utilities Act, is controverted by the fact that these poles and wires were not connected with his lines and were not used in connection with the distribution of electric energy for almost two years after they had first been placed in position. In this connection I desire to call attention to the fact that electric service consists not only of the possession of the necessary facilities, but is an accomplished fact only when these facilities are used in connection with the actual delivery of electric energy to any person who may apply for the service. In cases of this kind the Commission will not be misled by mere pretense, but will carefully look beyond the fact that a certain work may have been begun and inquire as to whether or not such work was necessary to serve the public and whether it can be considered as work commenced in good faith and carried on with reasonable diligence.

"In view of all the evidence introduced in this case, I find as a fact that the territory within a radius of three-quarters of a mile from the present Finley post office in Lake County was, on July 11, 1914, and for more than one year prior to that time served with electric

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energy only by Mt. Konocti Light and Power Company, and that as long as complainant supplies electric energy to all bona fide applicants for service within said territory at reasonable rates, and under reasonable regulations, the present or future public convenience and necessity does not and will not require the construction or installation of any poles, wires or facilities whatsoever by James A. Gunn, Jr., defendant in this case, in said territory, nor can any lasting benefit accrue to the public by permitting defendant to enter into competition with complainant in the distribution and sale of electric energy in the vicinity of Finley."

## **DISTRICT OF COLUMBIA**

### **226.5—Standards of Service.**

REGULATION FOR ELECTRIC SERVICE IN THE DISTRICT OF COLUMBIA. Decision of the PUBLIC UTILITIES COMMISSION OF THE DISTRICT OF COLUMBIA. January 30, 1915.

The regulations prescribed by the Commission cover the following subjects: location of meters, rules to govern all tests of watt-hour meters made pursuant to these regulations, rules for tests by electric corporations specifying apparatus to be used and the manner of making installations, tests and inspections, request tests and periodic tests; rules providing for referee tests by the Commission, and prescribing fees for such tests; and regulations requiring the maintenance of a standard voltage on all constant potential systems.

## **COMMISSION DECISIONS**

### **COMPILATION OF RULES AND REGULATIONS IN RE CUSTOMER'S DEPOSITS**

Continued from 6 RATE RESEARCH 313

## **WISCONSIN**

(4) The Commission on its own motion, investigated the refusal of the Madison Gas & Electric Company to furnish gas and electric service to F. M. Wylie. The Complainant has been a patron of the com-

pany at different times and different places of residence during the past seven years, and it appears that upon giving up his dwelling at any particular place he has neglected to pay for the service rendered during the last month of his residence at such place. The total amount of arrearages claimed is \$6.93. The complainant applied for service at a new place of residence and the company refused to furnish the service unless arrearages were paid. At complainant's last place of residence a deposit of \$5.00 was required, the deposit was paid and a receipt rendered. Since the payment of the deposit 52 cents has not been paid the company.

"The main question arising upon the conceded facts of this case is whether the company may refuse to grant service at any premises to an applicant who has become in arrears for service at other places, until such arrearage is paid. The company takes the position that it may apply the deposit made under the rule to any past indebtedness of the applicant, wherever incurred when he ceases to be a consumer at any particular premise, and may require him to liquidate in full such indebtedness, if the deposit is not sufficient for such purpose, and make a new deposit when he applies for service at a new place of residence, before it can be required to serve him. \*\*\*

"The company owes a duty, not only to itself, but to its patrons as a whole, to collect promptly all indebtedness due for services rendered.

"Because of such duty a company is permitted to demand prepayment of present service where the charge may be determined in advance, or in case of metered service may require a deposit of a sum of money sufficient to secure payment for the service rendered during stated intervals for which credit is extended, or may require a bond to secure such payment. Failing to establish or to enforce a rule to secure the prompt collection of bills when due, the company stands in the position of any other creditor and must resort to the courts to compel payment of such indebtedness. It may refuse to furnish service in the future unless prepayment is made, but because of its public duty it can not condition such service upon the liquidation of past charges.

"A further question is presented by the record which must be disposed of in order to settle the controversy between the parties. This arises out of the contention of the company that it may now apply the special deposit to all past defaults of complainant at premises other than those at which he was last served. If this contention is sound it would be necessary for the complainant to make another deposit before his right to service at his present dwelling should exist. It is conceded that the deposit has been impaired to the amount of 52 cents which is the delinquency for services rendered under the contract to secure the performance of which on his part the deposit was made. Assuming then that he should tender payment of such amount, the question is would he be entitled to a return of the



deposit, or, which would be the equivalent in effect, could he direct that such deposit be held by the company under its rule as security for bills that might become due and unpaid on the proposed contract which was rejected? In determining the legal relation existing between the parties, it is necessary to consider the application, the rule, and the receipt. The application contains a request that service be rendered upon certain premises and an agreement to pay for the service and to abide by the rules and regulations of the company. The rule here involved permits the company to demand a deposit of sufficient amount to secure the payment of one month's bills, which in the instant case has been fixed by the company at \$5.00. . . . The terms of the receipt . . . show clearly that the deposit is a security for the payment of all bills which are or may at any time become due under the particular contract. This is made very clear when we observe the terms of the receipt, which provided that the deposit 'is to be refunded with interest at the rate of 4 per cent per annum on final settlement or termination of the contract between the parties hereto upon the surrender of this receipt,' and that the same 'may be applied by the company as far as needed to the payment of any indebtedness due it at the time of final settlement without the presentation and surrender of the receipt.' The 'payment of any indebtedness' evidently means any indebtedness under the contract. One clause of the receipt thus provides for a return of the deposit with interest on final settlement or termination of the contract, providing all bills due under the contract have been paid, and the other, that when bills under the contract have not been paid, the company may then on the final settlement apply the deposit to the payment of such indebtedness. No other interpretation of the language of the receipt would be permissible under the circumstances. The purpose of the deposit under the rule is to secure prompt payment of current bills when due, and the rule cannot be extended beyond its terms so as to permit of the application of the security to a purpose not therein expressed, otherwise the rule might in certain cases not only defeat itself but allow the company to do by indirection what it would be unlawful to do directly.

"Unfortunate as the company may find itself in this case because of its inability to collect what may be a just debt without resorting to legal means, it seems to us that in the absence of any statutory authority to that effect, service cannot be withheld from one who is willing to comply with the rules and regulations requiring the furnishing of security for the payment of current bills when due, although he may be owing the company for past service at the time. While this rule may seem to work a hardship upon the company at times it should have the effect of greater scrutiny of credits on the part of the company in the future and a more extensive application of the rule relating to deposits.

"It follows from what has been said that if the complainant pays the amount due for service rendered on the premises on Jenifer Street

(since the payment of the deposit), he will be entitled to service at his present place of residence, and the deposit now in the hands of the company may be retained by it as security under its rules for the payment of any service it may render him there." (In Re Refusal of Service by Madison Gas & El. Co., 1914. 13 W. R. C. R. 518, 520-524.)

(5). In an investigation of the rates, rules and regulations of the Badger State Telep. and Teleg. Co., the Commission left the following rule unchanged:

"A deposit or properly signed guarantee will be required from parties who are not known to the company to be responsible for the payment of service charges." (In re Appl. of Badger State Telep. and Teleg. Co. Decided April 29, 1914.)

#### **226.2—Extension of Service.**

### **DEPOSIT IN CASE OF EXTENSIONS OF LINE OR MAIN.**

#### **MARYLAND.**

(1) In a proceeding brought to test the reasonableness of a gas company's rule, which imposed a charge of 70 cents per foot for extensions of gas mains in excess of 100 feet, the Commission held that the requirements of the company were reasonable. (City Realty Company vs. Consolidated Gas, Electric Light and Power Company, July 3, 1912.)

(2) In an investigation of a complaint involving the reasonableness of a rule of the Georgetown Gas Light Company requiring a deposit before making an extension of mains, the Commission says:

"There must be some limit to the obligation of a public service corporation to extend its facilities. Otherwise, the demand in sparsely settled districts might create a financial burden which would not only deprive stockholders of the company of a return upon their investment, but also seriously cripple the service of old customers through the company's lack of means to adequately maintain it.

"The rule of the company is, briefly, to make extensions of one hundred feet of mains for every dwelling to be supplied with gas. For extensions in excess of one hundred feet a deposit of seventy cents per lineal foot is required, and the amount of the deposit so made is refunded at the rate of \$70.00 for each dwelling erected along the line of, and supplied from, the extension for which the deposit is made, upon the completion of the plastering in the dwelling and notice thereof in writing to the company, until the entire amount of the deposit is returned to the depositor. . . .

"These rules appear to be reasonable precautions against loss and against deterioration of the present service, which all future applicants for service situated similarly to the complainant must observe." (Jones vs. Georgetown Gas Light Company, July 11, 1913.)

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**WISCONSIN.**

(1) The Commission held that a rule of the Beloit Water, Gas and Electric Company fixing the rate of \$1.25 per foot advance payment by consumer for extension of water main of over 50 feet was reasonable. (Beloit Water, Gas and Electric Company vs. City of Beloit, May 29, 1912).

(2) In an investigation of the Larsen Telephone Company the Commission ordered the extension of lines, if the parties desiring the service would advance to the Larsen Telephone Company \$45.00 for each party by which the number subscribing for service is less than a certain number. (In re Investigation of Larsen Telephone Company, December 5, 1913.)

(3) The Commission ordered the Green Bay Water Company to make extension of water main under the following conditions:

“That the water company shall build thirty-three feet of main, free of charge, for each added consumer, in case of application by consumers for extensions of mains; that where mains smaller than four inch will suffice the deposit for all over thirty-three feet per consumer shall be 30 cents per foot and that where mains of four inches or greater diameter are required, the deposit shall be \$1.00 per foot for such excess. . . .

“In case additional consumers are taken on later this deposit will be refunded, without interest, at the rate of thirty-three feet for each additional consumer. In case the city orders a hydrant or hydrants installed on any such extension, consumers' deposits will also be refunded, without interest.” (In re Investigation Green Bay Water Company, October 14, 1913.)

**REFERENCES****RATES****410—Cost of Service.**

THE WISCONSIN RAILROAD COMMISSION'S METHOD OF RATE MAKING, by E. N. STRAIT. Read Before the Joint Convention of Wisconsin Electrical Association and Wisconsin Gas Association. January 21, 1915.

Using data for a hypothetical plant the writer illustrates the apportionment of expenses for joint gas and electric properties and the determination of unit costs of the service of such utilities. Tables are given showing the apportionments between the gas and electric properties, and between the different departments of the service; and unit costs are derived, based on consumer, demand and output expenses. A schedule of electric rates for the hypothetical plant is worked out and

curves are plotted showing the relation of the rate schedules to the cost curve. Rates for the gas utility are presented in a similar manner. No definite rules can be given for apportionment of costs, as conditions in individual cases are to be considered, but the writer aims to present the "mechanical" procedure by which the Wisconsin Commission has determined rates for gas and electric utilities in a number of rate making cases.

## **INVESTMENT AND RETURN**

### **310—Valuation.**

VALUATION OF RAILWAY PROPERTY FOR PURPOSES OF RATE REGULATION, by PIERCE BUTLER. *Journal of Political Economy*, 17 pages. January, 1915, p. 17.

The valuation of railway properties, the basis for such valuation, the use to be made of the data compiled, and the effect of the valuation and possible subsequent regulation upon railroad securities and upon railway service in this country are among the subjects discussed in this article. Stated in brief the conclusions are as follows:

"First, as a practical matter rates cannot be made or based upon value. Value of the property is an essential fact in rate cases involving the question of confiscation, but a rate only high enough to be non-confiscatory may be much below what is reasonable. The same principles govern valuation of railroad property for the purposes of rate regulation as apply in the case of condemnation of private property for public use; and the same constitutional provisions which prohibit the condemnation of private property for public use without just compensation prohibit the taking of the use of the property by imposing rates that are unreasonably low and confiscatory. In both cases all values and elements of value must be included. 'Reasonable value' means value, and 'just compensation' means real, substantial, full, and ample compensation. Second, it has been the frequency of confiscation cases in which the value of the property has been an important test that has given rise to superficial opinion that rates are based upon value. Third, there is no foundation for the suggestion that there exists between the public and each railroad carrier the relation of principal and agent, or beneficiary and trustee. It is settled by repeated decisions of the Supreme Court of the United States that railroads are the private property of their owners, subject to regulation that charges shall not be excessive or unequal. Fourth, a proper valuation of the railroads such as that authorized by the federal valuation act, will furnish a guide to ascertain the reasonableness of the general level of rates in broad areas and to support readjustments thereof. Railroad rates ought not to be reduced as low as possible without confiscation; in fact many considerations suggest the wisdom of allowing railway carriers liberal and generous rates. The rate of return is definitely involved in confiscation cases and is related to rate regulation. New capital will not seek railroad investment if prohibited from earning as much as is paid in other large investments where the risk is no greater. Prospects of increasing returns and of rise in the market value of railroad securities formerly attracted capital to railroads, but conditions lately have not encouraged such investments."

### **315.4—Franchise Value**

REARGUMENT ON THE NEW JERSEY 90-CENT GAS RATE. *The Gas Age*, 3 pages. February 15, 1915, p. 169.

Abstracts are given of the cities' petition for a rehearing of the decision of the Court of Errors and Appeals in the Passaic Gas Case [6 RATE RESEARCH 180], and of the brief submitted by the Public Service Gas Company.

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**380—Taxation.**

VALUATION OF RAILWAY PROPERTY FOR PURPOSES OF TAXATION, by T. S. ADAMS. 16 pages. *Journal of Political Economy*, January, 1915, p. 1.

In this article, T. S. Adams, of the Wisconsin Tax Commission, discusses some of the larger aspects of the valuation of railway property for purposes of taxation, from the standpoint of Wisconsin practice and experience.

**MUNICIPALITIES****800—Municipalities.**

THE DESIGN AND OPERATION OF THE CLEVELAND MUNICIPAL ELECTRIC LIGHT PLANT, by FREDERICK W. BALLARD. 8 pages. *Journal of the A. S. M. E.* February, 1915, p. 102.

An abstract of the paper presented at the annual meeting of the society in December, 1914, is given, together with abstracts of the discussion which followed the reading of the paper.

**GENERAL****900—General.**

WANDERINGS IN ALTRURIA, *Weber's Weekly*, February 13, 1915.

The impracticability of certain reforms recently urged by President Wilson and others is discussed. The writer cites the statement of Henry Ford to the effect that his company, with a capital stock of \$2,000,000, did a business of nearly \$90,000,000 a year, with yearly profits of about \$28,000,000, and says:

“Observe the ratio of profit to ‘necessary investment.’ If Mr. Ford’s establishment were to be placed under control of the government and regulated according to the formula applied to railroads, he would not be permitted to earn more than about six per cent after having paid the competitive price for labor. That is to say, the Interstate Commerce Commission requires railroads to buy everything which they consume at the lowest possible price, and to hire labor without regard to whether the employe received enough whereon to raise a family and buy a home, or not. And, having done this, the railroad is permitted to earn for capital six per cent on its necessary investment. Under President Wilson’s Commerce Commission as it exists, or may be amplified, it may become possible that the Ford establishment will be brought under the same regulation that is now being enforced against railroads. When that time comes, Mr. Ford will have nothing but six per cent upon his necessary investment wherefrom to make bestowals upon his workmen. And, too, the workmen will have to be paid only the competitive wage rate.” . . .

**910—Promotion and Growth of Business.**

ELECTRIC LIGHT—A FACTOR IN CIVILIZATION, by S. E. DOANE. 12 pages, *Journal of the Western Society of Engineers*. January, 1915, p. 2.

The statement is made that within the last twenty years the total cost of producing electric light has been reduced to less than one-tenth of its former value, and that the incandescent lamp is responsible for a material part of this saving, the economies in production of electrical energy making up the balance. With the improvements in lamps and systems of distribution great progress has been made in extending the use of electricity, but the writer contends that the problems must be met that will make it possible to extend the use of electricity for lighting to the smallest tenements in our cities. There still remains "a field for illuminating service which, taken in the aggregate, would compare not unfavorably with the total existing electric lighting business."

**COURT DECISION REFERENCES.****243.6—Penalties.**

WADLEY SOUTHERN RAILWAY COMPANY V. STATE OF GEORGIA, Reviewing a Judgment of the Courts Enforcing a Penalty Imposed by Statute Upon the Railway Company for Its Violation of Administrative Orders of the State Railroad Commission. Decision of the UNITED STATES SUPREME COURT, Affirming the Decision of the State Courts. January 11, 1915, 35 Supreme Court 214.

The Commission issued an order requiring the company to change certain of its practices which were found to be unjustly discriminatory. The company notified the Commission that it would decline to comply with the order, and some time later a penalty suit was brought against the carrier by the state. The Superior Court of Jefferson County imposed a fine upon the company and this judgment was affirmed by the Supreme Court of the State of Georgia. The case was then appealed to the United States Supreme Court. In this decision the court cites a number of cases dealing with the enforcing of penalties for non-compliance with orders of state commissions similar to the Georgia Railroad Commission, and the court says:

"In the light of this unbroken line of authorities, therefore, a statute like the one here involved (under which penalties of \$5,000 a day could be imposed for violating orders of the commission), would be void if access to the courts to test the constitutional validity of the requirement was denied; or, if the right of review actually given was one of which the carrier could not safely avail itself. . . .

"But, where, as here, after reasonable notice of the making of the order, the carrier failed to resort to the safe, adequate, and available remedy by which it could test in the courts its validity, and preferred to make its defense by attacking the validity of the order when sued for the penalty, it is subject to the penalty when that defense, as here, proved to be unsuccessful."

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# RATE RESEARCH



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# Rate Research

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CONTENTS	Page
RATES	339
FAMOUS RATE PAPERS—No. 6	339
Effect of Width of Maximum Demand on Rate Making	339
COMMISSION DECISIONS	343
New Jersey	343
Wisconsin	347, 351
Ohio	349
Vermont	352
REFERENCES	352
Municipalities	352



# Rate Research

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Vol. 6

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### FAMOUS RATE PAPERS—No. 6

#### EFFECT OF WIDTH OF MAXIMUM DEMAND ON RATE MAKING.

By LOUIS A. FERGUSON. Paper read at the Twenty-Seventh Annual Meeting of the Association of Edison Illuminating Companies, Spring Lake, New Jersey, September 19 to 21, 1911. (Begun in 6 RATE RESEARCH 323).

(NOTE—Paragraph headings are not in original)

#### 521.1—Width

“Where more than one instrument is required to determine a particular customer's peak load, the labor involved in computing the maximum is quite an item, as the output of all the meters for the intervals on which the contract is based, must be added together to obtain the co-incident maximum demand. If a 5-minute interval were used, the labor in computing the maximum would be practically 12 times as great as for the one hour. The longer interval is, of course, more favorable to the consumer with the intermittent load, as it does not penalize him for the short peaks. This feature appeals to the consumer as the primary or maximum demand charge is usually the least intelligible to him, and the shorter the interval, the harder it is for him to understand. He realizes that the total kilowatt hours used bear some direct relation to the amount of work done, but the maximum demand, particularly if it be an instantaneous or very short interval demand, is not so well understood.

“In order to determine the relation between the one hour peak and the various shorter peaks, some accurate observations, most of them very recent, were made on different classes of consumers, all but one of which are in or near Chicago, and are given in Table I.

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EDITORIAL NOTE.—All indented matter is direct quotation.

TABLE I.

		Per cent. of one hour maximum		
		30 min.	15 min.	5 min.
(1)	Large street railway system.....	101.6	104.8	110.
(2)	Electrical steam railway terminal.....	117.	.....	.....
(3)	Interurban railway.....	109.	119.	126.
(4)	Large hotel.....	107.	107.	.....
(5)	Large department store.....	101.5	103.	110.5
(6)	Government building (large).....	103.	104.5	109.
(7)	Piano factory (average size).....	102.5	107.	113.
(8)	Grain elevator (average size).....	109.	113.	118.
(9)	Large stone quarry.....	101.8	106.	112.
(10)	Small stone quarry.....	105.	117.	128.
(11)	12-story office building.....	109.	113.	133.
(12)	19-story office building.....	108.	108.	138.

"In the two office buildings, the maximum demands under each of the three different intervals include only the elevator and general power and do not include any of the lighting. An inspection of this five-minute power load curve indicates that four extraordinary peaks at 9.20, 9.40, 12.40 and 3.50 caused the large percentage of difference between the 5-minute and the 30-minute peak on the 19-story office building. Similarly one very unusual peak at 8.30 A. M. occurred on the 12-story office building.

"An analysis of the data on the large department store given in Table I, indicates that if the bills for a year had been rendered on a 5-minute peak, the maximum demand on primary charge would have been 8.1 per cent. greater than on the 30-minute peak actually billed, but the total bills for the year would have been only 3 per cent. greater on the 5-minute than on the 30-minute peak.

"The difference between the 5-minute and 30-minute peak on the piano factory would have been 9 per cent. in primary charge but only 3.8 per cent. in the total charge. On the grain elevator the difference would have been 7.7 per cent. in primary and 3.9 per cent. in total charge.

"While none of the differences in the three cases analyzed or in most of those given in Table I, are very large, they show conclusively that the width of peak should always be taken into account in establishing rates for electric service. In other words, broadening the peak is equivalent to lowering the price.

"The actual result on price of a given broadening of peak depends—First on the amount of broadening, that is, from say 5 minutes to 30 minutes, and, secondly, on the steadiness or unsteadiness of load.

"The percentage difference in total income between the results obtained from 5-minute and 30-minute intervals, is relatively small and it is much better to take care of a small difference of this kind

by a slight adjustment in making the original primary rates, than to have any possibility of the most important customers feeling that the method used is not accurate enough and not fair to them in all cases. As an illustration, assume that there is 5 per cent. difference in total bill between the 5-minute and the 30-minute method. The power company should not feel that it is giving away this difference by using the 30-minute readings. In making up a schedule of rates this 5 per cent. should be taken into consideration by making the primary enough higher to compensate for this difference.

#### 622—Diversity Factor.

“Some consideration of the size of the consumer and the question of diversity factor will be worth while in a study of the relative merits of long and short intervals, and as to whether to use one reading or the average of several readings. With either lighting or power, but especially with power, the more intermittent the load and the smaller the consumer, the greater will be the diversity factor.

“In order to ascertain the present practice and apparent tendency in this matter, information was secured from the companies operating in the larger cities and which is given in Table II.

#### 521.1—Width.

TABLE II.

“Width of peak used in different cities in determining maximum demand charge:

	General Light and Power	Railway Power
Buffalo, New York.....	2 Min.	.....
*Spokane, Washington.....		5 Min.
New York, New York.....	5 to 10 Min.	.....
Cleveland, Ohio.....	15 Min.	.....
Los Angeles, California.....	15 Min.	.....
Milwaukee, Wisconsin.....	15 Min.	15 Min.
*Minneapolis, Minnesota.....	15 Min.	.....
*Rochester, New York.....	15 Min.	.....
St. Louis, Missouri.....	15 Min.	30 Min.
*Boston, Massachusetts.....	30 Min.	60 Min.
*Brooklyn, New York.....	30 Min.	.....
*Chicago, Illinois.....	30 Min.	60 Min.
Kansas City, Missouri.....	30 Min.	60 Min.
Detroit, Michigan.....	60 Min.	60 Min.
Philadelphia, Pennsylvania.....		60 Min.

“The member companies in cities marked thus \* use Wright demand indicators for part or all of their D. C. consumers, but not for A. C. consumers. Those marked thus ..... in one or the other column use either non-instrumental methods for determining the maximum demand; sell on a straight kilowatt-hour basis; or else sell no power for railway purposes of any kind.

"In some cases a company has used different intervals at different times, but those given in Table II are those reported by them to the writer as being used in their latest contracts for power or wholesale light and power.

"Only two of the companies in the fifteen of the larger cities of the country given in Table II use an interval of less than 15 minutes for general light and power; 6 companies use 15 minutes; 4 use 30 minutes and 1 uses 60 minutes. The writer believes that for the sale of general light power an interval of 5 minutes or less is unwise; also that a 30-minute interval is slightly better than a 15-minute interval and summarizes his reasons as follows:

"1. Short interval readings either introduce greater percentage of error in the maximum demand or added complications and difficulty in metering.

"2. Short interval readings are not necessary on a large consumer, because his load is usually made up of large number of units and therefore load is more uniform, or to express it differently, the ratio of 5 minutes to 1  $\frac{1}{2}$  hour maxima is small.

"3. The existence of a very high or large diversity factor between the small consumers and also between the consumers who use their power intermittently reduces the necessity for a short interval maximum for these small or medium sized consumers.

"4. The use of short and frequent intervals requires much more work to figure and is no inconsiderable item when it is considered that there is usually a subtraction of readings in one form or another and multiplication by a constant.

"5. The practicability of offsetting the slight apparent concession of using a longer interval or average of more than one maximum by a slightly higher primary rate of charge per kw. eliminates the necessity for use of short intervals.

"6. The use of a long interval, say 30 minutes, as against 5 minutes, makes only a very slight difference in income, which may easily be allowed for in ratemaking, and promotes much better relations with the consumer who can never understand why he should be penalized for an occasional or accidental demand which lasts only a few moments.

"The writer desires that in advocating the use of a maximum of moderate length with a compensated primary charge his position should not be construed as relinquishing the advantage to the supply company of the diversity factor of its various consumers, but rather the opposite, as stated in a former paper, in which he has said: 'The diversity factor is the very foundation rock of centralized energy supply. It is the birthright of the Central Station, the fundamental basis of its existence, and its resultant value belongs to the Central Station Company.'

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**COMMISSION DECISIONS****NEW JERSEY****300—Investment and Return.**

Complaint of SIGMOND UNGER Against the ACQUACKANONK WATER COMPANY, Alleging That the Company's Rates are Unreasonable. Decision of the NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS, Dismissing the Complaint. December 7, 1914.

The complaint alleges that the company's rates for water service are unreasonable and states in proof of this allegation that the company voluntarily offered a contract to the city to supply water at lower rates than the now existing rates. The offer was made more than six years ago and was not accepted by the City. The Board finds that the evidence of this offer cannot suffice to support the evidence that the now existing rate is unjust and unreasonable. The Board says:

"It must be borne in mind that a public utility moved by other and counterbalancing considerations may in a given case voluntarily offer a rate to a municipality, lower than the 'just and reasonable' rate which under statute this Board may fix.

"The Board may only take into consideration the justice and reasonableness of the rate. The company may take into account other considerations including those of immediate expediency. . . .

**331.3—Market Value of Stocks and Bonds.**

"The complainant contends that during recent years the company has declared dividends on its capital stock at an exceptionally high rate; that this establishes that the returns to the company afforded by its existing rates are exorbitant, and that the rates are unjust and unreasonable. This contention must have its foundation in the proposition that the par value of the aggregate of the securities of a public utility company is the base upon which the company is entitled to earn. From this it would follow that a rate that will afford a fair return upon the par value of the aggregate of such securities is just and reasonable, and that a rate which affords more than a fair return thereon is unjust and unreasonable.

"To this proposition this Board cannot assent. The par value and market value of the aggregate of outstanding securities of a public utility are elements that may be taken into consideration in determining whether an existing rate is or is not just and reasonable. They are not, however, controlling or determining factors. Whether an existing rate is or is not just and reasonable is to be determined where conditions are normal, by reference to the return

admitted thereby upon the 'fair value' of the property reasonably employed in the public service when operated with reasonable economy and efficiency.

"The par or market value of outstanding capital securities is sometimes less, and more often greater, than the 'fair value' of the property reasonably employed in the public service. If it cannot be successfully contended that the par or market value of outstanding capital securities when such value exceeds the 'fair value' of the property reasonably devoted to the public use must be accepted as the base upon which the company is entitled to earn, it logically follows that it cannot be successfully contended that such value of capital securities, when less than the 'fair value' of such property must be accepted as the measure of the company's right to earn. Further than this, the record in this proceeding indicates that for many years no dividends were declared on the stock of the company. When the total number of years the stock has been outstanding is divided into the aggregate amount of the dividends paid, it does not appear that the average rate has been exceptionally high. The size of a dividend, paid by a public utility cannot control a rate making body in determining the reasonableness of the utility's rate.

#### 346—Efficiency of Operation.

Whether after a company has met the expenses of operation, paid its fixed charges, and reasonably provided for depreciation, there is anything left for division among its stockholders, depends on the economy and efficiency of its operation, the amount of its fixed charges and the amount of its rate. Fixed charges may be reasonable, the volume of business what might be reasonably expected in the territory supplied, the rate reasonable, as judged by the recognized rules that determine the reasonableness of rates, and a utility having nothing left with which to pay a dividend on its stock. Another utility, operating under identical conditions, may, owing to superior efficiency and economy of management, have a surplus available for dividend distribution, but the amount of its capital stock may be so great that the per cent of the dividend would be very small. Still another utility working under the same conditions may have a much smaller capital stock on which to declare a dividend from a surplus equal to that accumulated in the second instance cited and the dividend rate would be very large. If the theory by which the complainant suggests the reasonableness of the rates of the respondent should be judged were adopted and carried to its logical conclusion, the utility first referred to above because it paid no dividend should have its rate increased; the second utility, because it paid a dividend which was very small might have its rate increased, but not so much as would be allowed the first; while the third utility because it paid a high dividend should have its rates decreased. It is evident from this that any attempt to carry into effect a rate making theory such as the complainant suggests would lead to absurdities. The rule

adopted by this Board in judging the reasonableness of a rate precludes the giving to the capitalization of the company controlling and determining force." . . .

### 311—Basis of Valuation.

The complainant submitted a valuation of the company's property made on behalf of the State Water Supply Commission. Of this valuation the Board says:

"They were made with a view to purchase of the properties by the State Commission and to sale thereof by the company, or failing that to an acquisition thereof by the State Commission through the exercise of the power of eminent domain.

"These appraisements, therefore, take into account elements which, while proper in a case in which a company is voluntarily to part with its property by sale, or be compelled to transfer the same by force of the State's power of eminent domain, should not be taken into account in a proceeding in which the State's power to regulate the rates of the company alone is involved.

"To illustrate: The attached business and the franchises may be valued and taken into account in fixing the price to be paid where a purchase is contemplated. Neither of these items (except to the extent of the actual cost of development and the actual cost of procuring the franchises) should be valued and allowed in the base, where the fixing of a rate under the State's power of regulation is in view." . . .

After reviewing the facts submitted in the case the Board finds that there is not sufficient evidence to prove that the present rates are unreasonable.

The statute, however, confers upon the Board the power to proceed upon its own initiative. The Board concludes that the facts in this case do not warrant the exercise of its powers. The following are the main reasons given for this conclusion:

In pursuance of the policy adopted by the State, of conservation of the sources of water supply, a valuation has been made by the State Water Supply Commission preparatory to the purchase of the properties involved.

"The valuation made by the State Commission does not indicate, *prima facie*, that the existing rates are so unjust and unreasonable as to demand their adjustment during the pendency of the negotiations now under consideration for the acquiring of the properties by State Commission." \* \* \*

In discussing further the advisability of the Board making an investigation on its own motion the Board says:

"The funds provided for the Board's use are necessarily limited. It is physically and financially impossible for the Board to conduct concurrent investigations on its own initiative of the rate schedules

of many utilities. Some selection must, of necessity, be made. This selection should depend on the existence of what appear, *prima facie*, to be unjust and unreasonable rates. Where *prima facie* rates appear to be unreasonable, the Board has made and will, as expeditiously as physical and financial limitations admit, make investigation and determination; inaugurating such investigations in the order of their importance.

"Where a municipality believes that a rate schedule is unreasonable, which does not fall within the schedules which the Board, on its own motion, because of *prima facie* unreasonableness, has planned to investigate the evidence to substantiate *prima facie* the claim of the injustice and unreasonableness of the existing schedule should be supplied by the municipality.

"This course is made necessary because there must be some limitation to the sum which the State can expend in any one year in rate investigations. The Board stands ready, as it is in duty bound to do, to hear any and all complaints brought before it. It is, and has, at all times been willing to give, through its employes, such assistance to parties before it, as is reasonable and practicable, in the effort to further and to reach a just result.

"When, however, a complaint brought by an individual challenges the justice and reasonableness of a rate schedule in its general application to the people of a community and when the schedule so challenged does not appear, *prima facie* to be unreasonable, efficient administration of the powers conferred upon it and of the State's funds entrusted to it, requires that before the Board proceeds to conduct on its own motion an expensive inquiry, the complainant should so support his challenge as to raise a fair presumption that the public interest requires immediate action by this Board.

"This the complainant in this proceeding has failed to do.

"The complaint therefore in so far as it attacks existing rates will be dismissed, but without prejudice."

#### 540—Minimum Charge.

In regard to the company's minimum charge the Board says:

"The claim of the complainant that the minimum charge should be abolished will not be allowed. The principle of a minimum charge by a public utility has heretofore been approved by this Board. It is uniformly recognized by other Commissions with powers similar to those of this Board, and has judicial approval. (*Gould vs. Edison Electric Illuminating Co.*, 60 N. Y. S. 559 *State ex rel. Weise vs. The Sedalia Gas Light Co.*, 34 Mo., App. 501). . . .

"Where, as always must be the case outside of rural districts, a large number of people in a community are supplied with water from a common source, distributed through mains and pipes running for long distances from this source, a very material investment for plant



and equipment is necessary before any water is delivered. The interest charges on this investment must be met. In order that the plant may be maintained in condition for efficient operation, money must be spent to guard against depreciation. Such expenses as are necessary in order that the utility shall be ready at all times to serve the people of a community, should be, as far as practicable, distributed among all the takers of the service and the charge to each taker cannot be governed exclusively by the quantity of water used. "The equity of this would be clearly apparent if one-half the residents of a community depended exclusively for a supply of water on delivery by a public utility, and the other half depended on some other source of supply, which source would not be available for one month during the year.

"To guard against the interruption of service all the people of the community, it may be assumed, would have their homes connected to the mains of the utility, and during the period of interruption to the other supply, would be served by it. Under such conditions the plant and equipment of the utility to meet the demands of those served for a single month, would necessarily be double that which would be required to supply those served continuously.

"Clearly, it would be inequitable in such a case to render bills monthly to all consumers with the rate so fixed that no monthly bill would contain more than one-twelfth of the annual cost of maintaining the plant in readiness to supply service to all. In such event, the users throughout the year would pay eleven-twelfths of the cost of maintaining the plant and equipment, while the users for one month would pay but one-twelfth the cost of maintenance and but one-sixth the cost of the maintenance of that part of the plan kept exclusively for their benefit.

"A condition involving this principle exists at a summer resort where a utility maintains throughout the year facilities enabling it to supply service during a few months, to a population several times as large as that served during the remaining months."

## **WISCONSIN**

### **129.3—Refusal of Service.**

IN THE MATTER OF THE ALLEGED REFUSAL OF THE BLOOMER ELECTRIC LIGHT AND POWER COMPANY TO REINSTATE POWER SERVICE FOR L. P. MARTINY. Decision of the WISCONSIN RAILROAD COMMISSION, Requiring the Company to Furnish the Service, January 23, 1915.

The transformer for consumer's service was burned out, presumably as a result of an electric storm, and the customer has since been without

electric service. The company insists that the customer should bear the cost of the new transformer and lightning arresters. The Commission says:

"It is the duty of a public utility supplying electricity for light and power to provide such devices as are necessary for the reasonable protection of its customers and the public. In *Columbus R. Co. v. Kitchens*, 83 S. E. 529, the Supreme Court of Georgia holds in substance that where an electric light company maintains overhead wires from its plant to a residence of one of its patrons for the purpose of supplying light to the house, the company is under duty to employ such approved apparatus in general use as will be reasonably necessary to prevent injury to the house or persons or property therein, arising from electricity which may be engendered by a thunder storm and strike the wires and be conducted thereby into the residence. The same court, in an earlier decision, *Heidt v. Southern Telephone Co.* 122 Ga. 474, used the following language:

"Persons or companies operating telephone and electric light systems for the transmission of electricity upon and over public highways owe to the public the duty of properly constructing and maintaining their respective wires and poles. They are bound to provide such safeguards against danger as are best known and most extensively used, and all necessary protection must be afforded to avoid casualties which may be reasonably expected."

"In Wisconsin this duty does not extend to apparatus which is situated on the premises of the consumer, since Section 1797m—90 of the Statutes exempts utilities from the requirement of installing on consumers' premises any part of the facilities incident to service, except meters and appliances for purposes of measurement.

"The language of the Statute is as follows:

"It shall be unlawful for any public utility to demand, charge, collect or receive from any person, firm or corporation less compensation for any service rendered or to be rendered by said public utility in consideration of the furnishing by said person, firm or corporation of any part of the facilities incident thereto; provided nothing herein shall be construed as prohibiting any public utility from renting any facilities incident to the production, transmission, delivery or furnishing of heat, light, water or power, or the conveyance of telephone messages and paying a reasonable rental therefor, or as requiring any public utility to furnish any part of such appliances which are situated in and upon the premises of any consumer or user, except telephone station equipment upon the subscriber's premises, and unless otherwise ordered by the Commission, meters and appliances for measurements of any product or service."

"In the present case the transformer is not located on the premises of the consumer and it is the usual practice to install a lightning arrester on the same pole as the transformer. Such installations are necessary for the reasonable protection of the consumer and his

property from electric storms and from the current carried by the high voltage transmission line. Had the lightning arresters been installed when the line was originally constructed, it is probable that the transformer would not have been burned out. Under such circumstances, it is unreasonable to require the consumer to bear the expense of installing a new transformer and the necessary lightning arresters. Such devices should be furnished by the utility and maintained by it."

## OHIO

### 132—Protection from Competition.

APPLICATION OF THE MIDDLEFIELD TELEPHONE COMPANY for a Certificate of Convenience and Necessity. Opinion of the Attorney for the OHIO PUBLIC UTILITIES COMMISSION, Finding That There is No Merit in the Application, November 18, 1914.

The Burton Telephone Company was established and furnishing telephone service in the territory sought to be entered by the applicant company. The applicant alleges that if it is allowed to enter the field it will furnish more efficient and better telephone service than it is possible to obtain from any telephone company now operating in the Village of Middlefield. The opinion of the Attorney for the Commission says:

"The petitioners are seeking the right to do business in the community described for the reason that public convenience and necessity demand a new telephone company. The determination of the Commission as to whether it will grant the certificate if public convenience and necessity require it, is necessarily a matter of discretion,—not an arbitrary discretion but a discretion enlightened and guided by its experience in the affairs of telephone companies, and the needs of the people, together with special facts brought before it in each particular case to guide it. When it is claimed that an existing telephone company does not afford the necessary facilities or does not keep the facilities in good repair, the Commission has a right to take into consideration the means that the law affords to regulate the management of the utility and to correct mismanagement and enforce the providing of proper service. If the Burton Telephone Company does not keep its plant in proper condition for efficient service by reason of the fact that they have not a repair man at Middlefield who can make repairs promptly and place the line in working order immediately, and keep its plant in proper condition for efficient service, it can be compelled to do so by a complaint properly filed before the Commission. This allegation has no place in the petition and should be stricken out. It is not

a legal reason for the granting of another telephone company the right to do business."

The Applicant further alleges that the present company does not have any connection with other telephone companies operating in adjoining territories, but decision points out that the law provides a remedy for the patrons of the present company in that physical connection can be required upon proper application.

#### **132.2—Fair Rates and Efficient Service.**

The Middlefield Telephone Company also states that their service would be of less cost to the telephone patrons of the community as they will provide free exchange of messages.

"The fact that a telephone company charges exorbitant rates or that the new telephone company, if permitted to do business, will decrease rates or furnish free exchange, will not justify the Commission in allowing another telephone company to do business. The fact that the Burton Telephone Company made an increase of its charges and cancelled all free exchange of messages, as averred, may indicate that there is not sufficient business in this community to support one company or it may indicate bad management. In any event, the question of rates can be taken care of in another way, and as before stated, this would not be a sufficient legal reason to authorize the Commission to grant a certificate of public necessity and convenience to the new telephone company. . . .

"Local sentiment aroused by the alleged misuse or abuse by a telephone company of an existing franchise offers no sufficient reason for the granting of the right to another telephone company to do business. In my judgment, before the Commission would be legally justified in granting a certificate of public necessity and convenience to do business to a new telephone company when there is already another telephone company doing business in a given community it should be shown that the traffic in a given community, is so great as not to be properly cared for by one company or where there is traffic sufficient to adequately support more than one company. This is necessary in order to restrict the building of telephone companies not actually needed in order to protect the existing companies and to prevent the citizens from investing in alluring but profitless enterprises; also for the protection of subscribers of telephone companies, as to have two telephone companies in any community naturally increases the cost of telephones, especially to business men who are required to have both 'phones in order to keep in touch with all the people of a given community.

"I would advise, however, that a hearing be had by the Commission and full opportunity be given the Middlefield Telephone Company to show that the public convenience and necessity require another telephone company in the community mentioned. Great latitude can be allowed the Middlefield Telephone Company in presenting

their evidence and this opinion can be used as a guide in the offering of evidence. But, in my judgment, it must show other reasons for the granting a certificate than those stated in the application. If all were established, there would not be sufficient legal reasons for acting favorably upon their application."

## **WISCONSIN**

### **781.5—Inductive Interference.**

EBENEZER TELEPHONE COMPANY VS. MILWAUKEE LIGHT, HEAT AND TRACTION COMPANY, Alleging That the Construction of Respondent's High Tension Electric Line Injures Petitioner's Service. Decision of the WISCONSIN RAILROAD COMMISSION, Dismissing the Complaint For Lack of Jurisdiction, January 26, 1915.

The respondent's high tension electric lines have been constructed parallel to petitioner's lines. Before the respondent erected its poles on the same side of the highway on which petitioner's lines are located, the petitioner requested it not to do so, but to place them on the opposite side of the highway. The respondent, however, constructed its lines as planned and petitioner claims that as a result its telephone lines have been short circuited. The Commission concludes that it would be much better if the high tension line or the telephone lines were changed to the opposite sides of the highway, but finds that it is without jurisdiction to order either company to re-locate its lines. The Commission's holding is as follows:

"The confronting difficulty in the case is the want of jurisdiction in the Commission to compel either company to change the location of its lines. If the telephone company has suffered damage because of the interference with its service and business, it may possibly recover the same in an action in court. It is the duty of the telephone company under the circumstances to render its service adequate at its own expense, if the respondent is unwilling to bear the same. If it has any remedy against the respondent it must seek the same in court. The situation here presented suggests the necessity of additional legislation, giving the Commission power to determine the location of high voltage transmission lines. Numerous cases are arising, due to the interference of high voltage transmission lines with telephone lines. If, before the construction of a high tension line, it was incumbent upon the corporation constructing such lines to apply to the Commission for authority as to route and location, the difficulty presented in the instant case and other cases pending before the Commission, would be obviated in the future. For the reasons stated, the petition must be dismissed."

**VERMONT****252—Commission Annual Reports.**

FOURTEENTH BIENNIAL REPORT OF THE VERMONT PUBLIC SERVICE COMMISSION, 1914. 988 pages.

The Fourteenth Biennial Report of the Vermont Public Service Commission has been issued in bound form. The report covers the period from June 30, 1912, to June 30, 1913, and contains the reports and the orders of the Commission rendered during this period, and abstracts of the statistics and annual reports of the companies under its jurisdiction. Rates for electric service in Vermont, as shown by the schedules filed with the Commission, are given in tabulated form (pp. 913-956).

**REFERENCES****MUNICIPALITIES****810—Municipal Local Regulation.**

Fifth Annual Report of the LOS ANGELES BOARD OF PUBLIC UTILITIES, For the Period from July 1, 1913, to June 30, 1914, 177 pages.

The report reviews the work of the Board for the period covered. Abstracts are given of the various decisions and rulings of the Board in formal and informal complaints. General information, statistics of operation and rate data are given for electric, gas, water, and telephone utilities and for steam railroads, local electric railways, interurban electric railways, rapid transit, motor omnibus lines, etc. In the report on electric utilities the rate resolution prepared by the Board and submitted to the City Council is given. This resolution fixes the rates to be charged for electric light and power furnished by any person or company to the City of Los Angeles or its inhabitants for the year commencing July 1, 1914, and ending June 30, 1915. A copy is also given of the city ordinance providing for the testing of electric meters.

**840—Public Operation.**

MUNICIPAL ELECTRIC LIGHTING PLANTS IN CALIFORNIA. 1½ pages, *Engineering News*, February 18, 1915, p. 338.

A summary is given of information contained in a recent bulletin issued by the City Club of Berkeley, California, which presents all of the data available on the operation of the 17 municipal electric lighting plants in California. Tables are given showing populations, incomes, expenses, profits, surpluses, bonds, rates, etc. In attempting to present the data so that it will be of practical use for comparative purposes, the need of a uniform set of accounts for municipal utilities becomes very apparent.

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# RATE RESEARCH



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# Rate Research

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CONTENTS		Page
<b>RATES</b>		355
City of Leeds, England		355
<b>COMMISSION DECISIONS</b>		357
Wisconsin		357, 358
California		359, 364
New York		360, 366
Washington		361
Illinois		364
Pennsylvania		365
<b>REFERENCES</b>		367
Rates		367
Court Decision References		368



# Rate Research

Vol. 6

CHICAGO, MARCH 4, 1915

No. 23

For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### CITY OF LEEDS, ENGLAND

#### 720—Rate Schedules.

CITY OF LEEDS, Electric Lighting Department. Rateable Value System of Charging for Domestic Supplies.

The following schedule of electric rates, based on "rateable value," has been published by the City of Leeds, effective January 1, 1915, as an optional rate for consumers of electrical energy for any purpose on premises occupied solely as private residences.

#### Rate.

##### An Annual Fixed Charge of

£ s. d.

1 10 0	(\$ 7.265)	to premises of which the Rateable Value does not exceed £15 (\$72.975) per annum.
2 0 0	(\$ 9.73)	to premises of which the Rateable Value exceeds £15 (\$72.975), but does not exceed £20 (\$97.30) per annum.
2 10 0	(\$12.13)	to premises of which the Rateable Value exceeds £20 (\$97.30), but does not exceed £25 (\$121.625) per annum.
3 0 0	(\$14.595)	to premises of which the Rateable Value exceeds £25 (\$121.625), but does not exceed £30 (\$145.95) per annum.
3 10 0	(\$16.995)	to premises of which the Rateable Value exceeds £30 (\$145.95), but does not exceed £35 (\$170.275) per annum.
4 0 0	(\$19.46)	to premises of which the Rateable Value exceeds £35 (\$170.275), but does not exceed £40 (\$194.60) per annum.
4 10 0	(\$21.86)	to premises of which the Rateable Value exceeds £40 (\$194.60), but does not exceed £45 (\$218.925) per annum.
5 0 0	(\$24.325)	to premises of which the Rateable Value exceeds £45 (\$218.925), but not to exceed £50 (\$243.25) per annum.
16%		upon the Rateable Value to premises of which the Rateable Value exceeds £50 (\$243.25) per annum.

With the addition of an

#### Energy Charge of

One-half penny per kilowatt-hour of energy consumed.

EDITORIAL NOTE.—All indented matter is direct quotation.

**Prompt Payment Discount.**

A discount of 5% will be allowed upon accounts paid within one month after the date of rendering.

**Term of Contract**

Any consumer electing to be charged under this scale shall continue to be so charged for a period of at least twelve months.

**Terms and Conditions**

The fixed annual charge will be payable in four equal quarterly installments. The fixed charge will not be affected by any additions or alterations to the electric lighting, power, or heating installation, but the consumer should give notice in writing to the Department before making alterations in order that the work may be inspected, and that the meter and other apparatus of the Corporation may, if necessary, be exchanged to suit the altered demand.

**510—Forms of Rates.**

Addressing the "Point Fives", an association to promote the adoption of the rateable value tariff, at a meeting held February 15, 1915, A. Hugh Seabrook, Chairman, says:

"We may without doubt say that we now have established a domestic tariff on sure foundations which will hold its own and certainly continue to bring converts when they appreciate the significance of what is happening. Its foundations are the foundations of all commercial success viz;—simplicity and economy for the consumer, progress and profit for the supplier.

"Is it not time that the energy of this association was concentrated on reclaiming another field, and one which is more difficult to handle than the residential one? I refer to the trading class of property covering shops, hotels, etc. The enormous variation in the rateable value of this class of property depending on its position, is a serious drawback to the elaboration of a rateable tariff, but it does not appear to be insurmountable.

"A rate based on a sliding scale of percentage on rateable value and fixed price per unit worked out as the result of combined experience, is in the writer's opinion, a tariff which could be utilized advantageously and with profit to all concerned. The higher rated premises would have a lower percentage charge on the rateable value than the smaller ones. The general lines of the tariff being arrived at, it could be pigeon-holed until an opportune time arrived to put it into force in a particular district." . . .

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## COMMISSION DECISIONS

### WISCONSIN

#### 300—Investment and Return.

COMPLAINT V. CITY OF MILWAUKEE ET AL., Asking That the Rates Fixed in the Milwaukee Fare Case Be Set Aside and Reasonable Rates Established. Decision of the WISCONSIN RAILROAD COMMISSION, Setting Aside Its Former Order and Reestablishing the Rates Fixed in the Company's Franchise. January 30, 1915.

The petitioner, the mayor of the City of Cudahy, petitioned the Commission to reconsider its order of August 23, 1912, in the light of the present earnings of the Milwaukee street railway companies, and asked that the order be so modified that the companies may have a fair and reasonable return.

The Commission discussed the changes which have taken place since the Commission's investigation in the fares case—the additions to the physical property, the increased cost of maintenance and operation due to the increase in the cost of materials and labor, and the falling off in revenue due to the reduction in fares, extended use of transfers and various other factors.

The Commission's conclusions in the case are as follows:

"The increases in the operating expenses and the fixed charges of the respondent companies and the failure of their gross and net revenues to maintain their ordinary annual growth during the past few years, that have thus been described, are due to causes that are wholly beyond the control of the respondent companies. These changes, however, as the facts herein clearly show, have resulted in this, that the net earnings of the respondent now are and for some time have been considerably lower on the investment than the rates or costs at which it is well known new capital for similar undertakings can in the long run be had. The conditions in this respect are also considerably aggravated by the fact that in this case, as in nearly all large and growing cities there is a constantly growing demand for improvements in and extensions to the local street railway service. The tendencies and changes in the expenses and earnings in question were seen when the order complained of herein was made, but it was not then thought that they were permanent, but rather temporary in their nature. Had the nature of these changes then been better understood, it is very certain that the order in question would not have been made. Justice and the law demands that the rates charged by public utilities for the services they render shall be reasonable to the utilities as well as to their patrons. The best interest of the greatest number in matters of this kind can as a

rule be best promoted by allowing rates that are high enough to cover the cost of reasonably adequate service. As the rates provided by the order complained of fall short of this, we are, in fairness to the petitioner and in the interest of its patrons, compelled to find that this order is unreasonable and that it should be repealed or abrogated.

"It is therefore ordered that the order of this Commission on August 23, 1912 (10 W. R. C. R. 1, 305), to the Milwaukee Electric Railway and Light Company discontinuing the ticket rate of twenty-five for \$1.00, and substituting therefor a ticket rate of thirteen for 50 cents, is hereby rescinded."

## WISCONSIN

### 400—Rate Theory.

GEORGE P. DRAVO, et al v. THE MILWAUKEE ELECTRIC RAILWAY AND LIGHT COMPANY et al, in re Milwaukee Suburban and Interurban Railway Rates. Decision of the WISCONSIN RAILROAD COMMISSION, Amending its Former Order Fixing Rates For Such Service. October 28, 1914.

Complaints were entered against the suburban rate of fare of the Milwaukee Electric Railway and Light Company and the Milwaukee Light, Heat and Traction Company as authorized in the previous decision *In re Milwaukee Suburban and Interurban Railway Rates*, decided January 2, 1914, 13 W. R. C. R. 475. In the main, these complaints stand for a reduction in suburban fares through the restoration of the fare schedule existing prior to the order, through additional single fares, and through commutation tickets. The Commission says:

"Facts and circumstances other than financial conditions, such as value of the service, uniformity, existing and future possible traffic, etc., must undoubtedly be considered when single fare extensions are in question. In the instant case no good reasons appear for abandoning the general basis employed in former cases. Recent developments, however, indicate that it is justifiable from an economic as well as from a legal point of view to lay somewhat more emphasis upon financial conditions." . . .

### 340—Rate of Return.

"To say that the use of the streets for right-of-way purposes is sufficient payment for additional stops, is to place the entire finance of the respondents upon a hypothetical rather than upon an actual basis. Where actual outlays and incomes have been used to determine the rate of return, it does not seem prudent to add conditions

which in no way enter into the existing financial income accounts directly. The use of the streets free without a direct license or rental payment, as is most likely inferred, is one of the conditions of operation, and to allow an additional credit for this use would be unrepresentative of existing conditions. . . .

"There are many rights in respect to street railway rates and service to which the public is in justice entitled, regardless, in a measure, of the reasonableness in itself of the return which the investors in the serving company receive. That the right to a single fare of less than five cents for any ride is one of these rights seems untenable. No extreme hardship is placed upon the patrons in these suburbs by paying a minimum fare. It is difficult to see how further concessions in this respect could be granted unless those who have devoted their capital to the service of the public receive a fair return thereon. Such a return is not now being earned upon the suburban system as a whole. Additional concessions for minimum fare over those made for through fares and other purposes cannot be defended upon any basis. We must therefore deny, for the present at least, requests for a minimum fare of less than five cents."

(The discussion of the Commission and the order in this case are not of interest to electric companies as it deals entirely with the details of adjusting fares and charges for suburban service.)

## **CALIFORNIA**

### **450—Value of the Service.**

Application of NORTH MONETA GARDEN LANDS WATER COMPANY for an Order Authorizing an Increase in Water Rates. Decision of the CALIFORNIA RAILROAD COMMISSION, Fixing the Rates, January 29, 1915.

The petitioner applied for an order authorizing an increase in rates for water for domestic and irrigation uses. The Commission finds, after investigation, that the present revenue is not sufficient to pay even operating and maintenance expenses, with no allowance for interest on the investment or depreciation. The service is being supplied in an undeveloped community and the Commission says:

"It is elemental that in the beginning of a water utility's operations, the rates frequently cannot be made high enough to pay the normal allowance for depreciation. If an attempt were made to charge the first few customers rates high enough to cover this charge, they could not afford to take water or to settle on the land. Of course, in the long run, the utility must receive an adequate allowance for depreciation, if fair judgment was used in the construction of the

system. The present consumers of applicant's system cannot reasonably be called upon to pay the amount for depreciation which will be paid by the consumers when the system is more fully utilized."

## NEW YORK

### 300—Investment and Return.

Complaint of the CITY OF ROCHESTER v. NEW YORK STATE RAILWAYS, Asking That a Lower Rate of Fare for Rush Hours be Authorized. Decision of the NEW YORK PUBLIC SERVICE COMMISSION (2D) Dismissing the Complaint, February 16, 1915.

The complainants ask that the company's 5 cent fare be reduced to 3 cents for transportation during the rush hours designated in the petition.

"The act of the Legislature in fixing a five cent maximum fare for street railroads in cities and incorporated villages (Section 181, Railroad Law) does not bar action by this Commission requiring a reduction of such fare as charged by any street railroad company upon a showing that such fare of five cents for a general or particular service rendered is unreasonable or unjust. *Bus Men's Association of Ticonderoga v. D. & H. Co.*, 2 P. S. C. 2d Rep. 78.

"Section 49 of the Public Service Commissions Law empowers the Commission whenever it shall be of opinion that a railroad rate is unjust, unreasonable, unjustly discriminatory or unduly preferential, or is anyway in violation of any provision of law, to determine the just and reasonable rate to be thereafter observed and in force as the maximum charge, notwithstanding a higher rate has been authorized by statute; but in so determining the future maximum rate the Commission is directed to pay due regard, among other things, to a reasonable average return upon the value of the property actually used in the public service and to the necessity of making reservation out of income for surplus and contingencies. The language of the statute seems to contemplate the formation by the Commission of a belief based upon the evidence generally that the rate complained of is unreasonable or unjust, and that then, in determining the reasonable rate for the future, the Commission must pay due regard to a fair return upon the property value and the necessity of reserving from income moneys for surplus and contingencies."

### 340—Rate of Return.

It was estimated that the company's present percentage return on the agreed valuation is 8.58. An investigation was made to determine what effect the proposed reduction in fares would have on the company's revenue and it was estimated that if the three cent rate was put into

effect during the rush hours the rate of return would be reduced to  $4\frac{1}{2}$  or 5%. The Commission says:

"It is of prime importance that the service of this respondent in Rochester, as well as elsewhere in its territory, shall not only be sufficient in general but in all respects adequate. This Commission should not, if it could, strike down the revenues of this company to effect a reduction of fare and leave its resources for improving and keeping up the efficiency of its service insufficient for that prime purpose. A reserve for surplus above operating cost is essential to provide for these improvements either by full payment therefor from such surplus or to meet increased charges on required additional bond capital or return upon necessarily issued additional stock. . . ."

"If the valuation is not too high, and that is a matter which can not be discussed under the agreement to use the valuation then the return of  $4\frac{1}{2}$  to 5 per cent is too low to permit the reduction demanded. There is no escape from that conclusion.

"In so holding we are controlled by the law, with no room in any sense for the exercise of discretion. A 6 per cent return upon capital employed in the public service has been deemed to be a minimum fair return and this after all other allowances necessary to the conduct of the business shall have been made. In many cases a considerably higher rate of return has been held to be required. There may arise here and there cases of over installation of property or over extension of lines where, the general rate being involved peculiar conditions would justify the conclusion that a lower return than has been ordinarily allowed would be fair. But we have no such peculiar conditions in this case where a special rate is demanded and all of respondent's property and lines are fully required for the public service in Rochester."

## **WASHINGTON**

### **300—Investment and Return.**

F. W. BROWNE v. PACIFIC NORTHWEST TRACTION COMPANY Asking for a Reduction in Passenger Fares and Freight Rates of the Respondent Company. Decision of the WASHINGTON PUBLIC SERVICE COMMISSION Ordering a Reduction in Rates, December 24, 1914.

The Commission, in making an investigation of the valuation of the company's property for rate making purposes included an unearned increment of \$70,708. This allowance was discussed as follows:

"There are two theories upon which the company is entitled to this so-called unearned increment.

"1. The company helped to create it.

"2. The company is entitled to the present value of its property

used and useful in the operation of the road, and it must necessarily include the unearned increment.

"As to the justice of the allowance of the so-called unearned increment there is a wide divergence of opinion. The pioneer goes out into the forest, and by his detriment of time, labor and privation builds a home. Others follow, and by joint efforts a community is established where once the forest stood. The property of the original settler has now become valuable, and the enhanced value over the actual cost and expenditure of the settler we call the 'unearned increment.' The term 'unearned' is a mis-nomer, for the enhanced value has been fairly earned by years of labor and deprivation. The man who finally reaps the harvest may not be the same individual who sowed the seed. The pioneer may not be able to await the day of the harvest, but if he does, no man will say that the harvest is not rightfully his, or that it has not been fairly earned.

"So too does the railway company project its line into new territory with a full knowledge of the detriments to be overcome. The company considers from the beginning that no adequate return will be made during the early years of its history, but, like the pioneer, it helps to build up a new territory, with confidence that an increment will result sufficient to more than cover the detriment in loss of returns or otherwise. The history of our western country more than justifies the assurance that such return invariably follows. We have accorded to the individual and to the company the same rule of measurement, and it seems that in all fairness such rule should be applied."

#### 315.1—Going Value.

"But now comes the company with the new theory of valuation which demands more than is accorded to the individual. It claims a 'development cost' in addition to the unearned increment. In simple language it says:

"During these lean years while the company was helping to create the increment the stockholders received no adequate return, and now we ask that the loss so incurred be made good by capitalizing the loss occasioned the company by the lack of returns during the early years."

"Conceding the argument of counsel for the company to be just, and that a railroad company is entitled to earn 8 per cent. on its investment from the day of its inception, in addition to the increment, it would be entitled to earn a return upon \$125,917.58 in addition to the other items capitalized. If we capitalize this amount, as counsel for the company demand, it means that throughout the coming years the patrons of the company will be required to pay a return upon the amount so capitalized. If this claim be just it should be allowed. No pioneer reaps, in addition to the increment, as the result of his labor, any development cost. No one guarantees to him that in addition to the increased value of his property he shall



receive an additional return during the years, based upon the amount of his losses during the lean years. Until we bring ourselves to believe that one rule shall be made for the railroads and another for the rest of the world, we cannot concede the justice of the demand for the so-called development cost in this case. But for argument's sake let us concede that development cost should be calculated."

The Commission concludes that in this case it is immaterial so far as the results are concerned whether development costs are considered or not, for subsequent excessive earnings have more than off-set any development cost the company suffered since it owned this property.

### **360—Depreciation.**

In discussing depreciation the Commission says:

"It is the custom of some utilities to neglect the establishment of a depreciation account, and then ask the Commission to consider the depreciation in ascertaining the value of its property. The Commission is strongly of the opinion that a definite depreciation account should be fixed in the operating expenses of the company each year for this purpose. It is unfair to the patrons of a public utility to require an additional return to cover depreciation and then have the road keep no account covering depreciation. . . ."

### **340—Rate of Return.**

"The maximum legal rate of interest in the State of Washington is 12 per cent. Much evidence was introduced by the company to the effect that 10 per cent was a proper per cent. to be allowed utilities operating at the present time and under present conditions. This testimony was based upon the usual hazards of money invested in such enterprises. We desire it to be distinctly understood that we do not concede that 10 per cent. means a fair rate upon the property of a public utility having the limited hazards this road presents. All charges made by public utilities must be just and reasonable. Service instrumentalities, equipment, and facilities shall be such as will promote the safety, health, comfort and convenience of their patrons, employees and the public, and the rules and regulations must be just and reasonable.

"Whatever may be said of the fair return to the utility the interests and the rights of the public in such utility must be considered. The result of decreasing a rate, or of increasing a rate, cannot always be foretold. This Commission has increased rates, and as a result the return to the company has declined; and on the other hand rates have been decreased and the return to the utility increased as a result. The record contains definite testimony of many witnesses whom this Commission has a right to believe, that the rate charged by the Company has resulted in preventing a proper development of the territory through which this road extends."

The Commission finds that the Company's rates are excessive and lower rates are ordered.

## CALIFORNIA

### 132—Protection from Competition.

APPLICATION OF THE VALLEY TELEPHONE COMPANY FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY. Decision of the CALIFORNIA RAILROAD COMMISSION, Dismissing the Application, November 23, 1914.

The Valley Telephone Company applied for a certificate of public convenience and necessity to construct and operate a telephone system within the City of Holtville. The Imperial Telephone Company is at present operating in the city and protests against an invasion of its territory by the applicant company.

#### 132.2—Fair Rates and Efficient Service.

"No evidence was introduced tending to show that the Imperial Telephone Company was not adequately serving the territory within the city limits of Holtville, nor that its rates were unreasonable, nor that in any respect it was failing in its duty to the public.

"It was frankly stated by the president of the applicant that there was no demand or need for two telephone systems in the city, and that it was the expectation of applicant that if it was admitted into the city it would acquire as subscribers all of the people who use telephones. In other words, applicant expects to eliminate the Imperial Telephone Company's business in the city if it is allowed to enter." . . .

#### 132.8—Unnecessary Duplication.

"The evidence in this case does not present a situation which would justify the Commission in permitting applicant to invade the territory of the Imperial Telephone Company, duplicate its plant and either put it out of local business or itself fail to make a success of the venture."

## ILLINOIS

### 224.5—Rates Fixed by Contract.

APPLICATION OF THE COLFAX TELEPHONE COMPANY FOR AUTHORITY TO CHANGE RATES. Decision of the ILLINOIS PUBLIC SERVICE COMMISSION, Establishing a New Schedule of Rates. December 17, 1914.

It was urged on behalf of the Village of Colfax that the village has a contract with the telephone company in the form of an ordinance,

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granting franchise rights for the construction and operation of the telephone system for an unlimited term, which provides a maximum rate of \$1.00 per month for telephone service. The Commission refers to its order upon the application of the Fairbury Telephone Company, decided June 5, 1914, in which the Commission says:

"The statute providing for the regulation of public utilities within this State was passed in the exercise of the police power of the State, and all ordinances or contracts affecting rates or charges by public utilities for commodities or service to be rendered or performed by them must be held to have been made in view of and subject to the right of the State to exercise this police power in such a way as to disregard such contracts or ordinances, if the interest and welfare of the public should so demand."

The Commission holds that the act to provide for the regulation of public utilities in the State expressly authorizes this Commission to determine and fix just, lawful and sufficient rates or other charges, classifications, rules, regulations, contracts or practices of any public utility doing business within the State, and the Colfax Telephone Company is authorized to put in effect a schedule of rates higher than those fixed by the ordinance.

## **PENNSYLVANIA**

### **251—Publicity.**

PUBLICATION OF COMMISSION'S RULINGS, REGULATIONS OR ORDERS BY PUBLIC SERVICE COMPANIES. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, General Order No. 12, January 6, 1915.

"It having come to the attention of the Commission that certain public service companies have been sending out written or printed notices or other such communications to their patrons in which they have attributed to the Commission, from time to time, the making of alleged rulings, regulations or orders which in point of fact have not been made by the Commission as represented, and thereby have occasioned misunderstanding, confusion and inconvenience to their patrons and the public as to various matters, but especially with regard to the time and manner of payment of bills subject to discount:

"It is hereby ordered: That the above practice shall be discontinued and that hereafter no administrative ruling, regulation or order shall, in any such written or printed notice or other communication whatsoever, be stated by any public service company to have been made by the Commission, unless an exact copy of the particular ruling, regulation or order so referred to is therein set forth at length and the date thereof also stated.

"Copies of such rulings, regulations or orders may be had on application to the Secretary of the Commission. Public service companies

assume the risk of the accuracy of copies of rulings, regulations or orders obtained from any other source, and exact copies of all such notices sent by such companies to customers shall be filed with the Secretary of the Commission within three days of date of issue thereof."

## NEW YORK

### 781—Adequacy of Service.

Complaint of F. RAY COMSTOCK v. MUNICIPAL GAS COMPANY OF THE CITY OF ALBANY, Alleging Refusal to Supply Applicant with Direct Current Electricity. Decision of the NEW YORK PUBLIC SERVICE COMMISSION (2 D.), Dismissing the Complaint, December 20, 1914.

"The complainant is the lessee of Harmanus Bleecker Hall, a large theatre in the City of Albany. He is now supplied by the respondent with alternating current for lighting, and 500-volt direct current used in driving a fan. He asks that the company be required to furnish 110-volt direct current, chiefly for operating what is known as a spot light. The respondent furnishes in the City of Albany 115-volt and 230-volt, 40-cycle, single-phase alternating current for lighting; 220-volt, 40-cycle, 3-phase alternating current for power; and 500-volt direct current for power. In order to furnish the form of current desired by the complainant, it would be necessary to install, either at the sub-station of the respondent or on the premises of the complainant, a transformer for the purpose of converting the alternating current into direct current, or reducing the voltage of the direct current from 500 to 110. This the respondent refuses to do, although it is willing to supply either alternating current or 500-volt direct current in any quantity desired, if the complainant will install the necessary transformer.

"It appears that there is no general demand for 110-volt direct current. There is a demand for direct current, with many different voltages, according to the use to which it is put. This seems to run from 24 volts to 500 volts. In all cases where a current is desired by a particular consumer not conforming to the standard current furnished by the respondent, the consumer is required to install his own apparatus for transforming the current in form or voltage to that required for his use.

"Where, in the community served by an electrical corporation, there exists a general or large demand for any particular species of current, it may become the duty of the company to provide, at its own expense, current of that character and transmit it to the consumer. It would, on the other hand, be obviously unreasonable to

require the company to generate at its plant every species of current that might be desired by every consumer in the community. It is equally obvious that if the respondent can be required to supply 110-volt direct current to the complainant, it must also be required to furnish direct or alternating current of any voltage desired to every other consumer, either through its plant or through transformers furnished by it on the consumer's premises. So to require would be unreasonable. If a particular consumer desires for special use a form of current different in character or voltage from the currents generally transmitted by the company and these currents meet the general demand of the community, the consumer must supply his needs by installing, at his own expense, the necessary apparatus for transforming the current supplied to that desired.

"This conclusion, of course, in no way affects the duty of company or consumer to install new apparatus where a change in current, made by the company of its own initiative, requires a change in the consumer's apparatus.

"For the reasons stated the complaint should be dismissed."

## REFERENCES

### RATES

#### 514—Demand Rates.

THE DEMAND RATE FOR GAS SERVICE, by C. H. COOK, Kenosha Manager, Wisconsin Gas and Electric Company. Read Before the Joint Meeting of the Wisconsin Electrical Association and the Wisconsin Gas Association. 3 pages. *The Gas Age*. March 1, 1915, p. 217.

The writer discusses the advantages to be gained by the adoption of a demand basis of charging for gas service, and concludes as follows:

"This discussion of a demand rate for gas service has been developed in the belief that the schedules usually prevailing do not parallel the cost of service with sufficient accuracy to render substantial justice as between the small demand low load factor domestic customer and the large demand high load factor industrial user or indicate the resultant price per thousand cubic feet at which gas may be sold at a profit to the larger user. Further analysis of the factors affecting the relative distribution of costs may show that a larger proportion of the investment charges might, with sound reason, be assessed against the customer and a smaller proportion against the capacity demanded. As interest in this subject increases and further analytic studies are made, the most advantageous apportionment of charges as between the several costs will be developed and commercial schedules involving the demand principle applied. With these applications there will undoubtedly come a practicable maximum demand gas meter, the advent of which will assist in the development of the industrial use of gas."

**600—Rate Differentials.**

Brief Submitted on Behalf of the Merchants' Association of New York in the Matter of the STADTLANDER and EWOLDT COMPLAINTS Against the NEW YORK EDISON COMPANY, 28 pages.

Brief on behalf of the Merchants' Association of New York has been submitted to the New York First District Commission. The intervenor in the complaints against the New York Edison Company alleges that the reduction in the company's rates should be distributed over the entire schedule to the benefit of the wholesale consumers, instead of being applied as a reduction of the Company's maximum retail rates.

**COURT DECISION REFERENCES.****225.1—Filing of Schedules.**

MICHIGAN RAILROAD COMMISSION ET AL. V. DETROIT AND MACKINAC RAILWAY COMPANY ET AL. Decision of the MICHIGAN SUPREME COURT, February 4, 1915. 150 Northwestern 861.

A previous order of the court required respondents "to put into full force and effect the three several orders of the Michigan Railroad Commission." The present action seeks to have the company punished for its failure to comply with the order of the court.

In alleged compliance with the order, the company filed typewritten copies of certain of its rate schedules with the commission and other typewritten copies were filed in the various offices of the company. The court says:

"It was not in compliance with Section 10a, of Act No. 300 of the Public Acts of 1909, which provides:

" 'Such schedules shall be printed plainly in large type, and copies for the use of the public shall be kept on file for public inspection in every depot, station or office of such carrier where passengers or freight respectively are received for transportation or where tickets are sold, in such form that they will be accessible to the public and can conveniently be inspected.' "

**243.6—Penalties.**

The company claimed that the orders of the Commission are unreasonable and "extremely difficult in operation." The court states that this is a criticism which should be addressed to the Railroad Commission and that in the proceedings the court is not concerned with the validity of, or the workability of, the orders in question. The court finds the company guilty of contempt.

"That guilt, however, is technical only, for we are satisfied that the failure of respondents to comply fully with the order of this court was not wanton, but that they acted in good faith upon the advice of reputable and competent counsel, and under a construction of the order, which, while not warranted, was colorable."

Under these circumstances no fine or other punishment is imposed, but the company is given five days within which to comply literally with the mandate of the court.

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# Rate Research

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CONTENTS		Page
RATES		371
Baltimore, Maryland		371
COMMISSION DECISIONS		373
Wisconsin		373
Pennsylvania		379
California		380
REFERENCES		381
Investment and Return		381
Public Service Regulation		382
Municipalities		383
General		383
Court Decision References		384



# Rate Research

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Vol. 6

CHICAGO, MARCH 11, 1915

No. 24

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For statement of facts and opinions contained in papers abstracted herein, the Association does not hold itself responsible

## RATES

### BALTIMORE, MARYLAND

#### 720—Rate Schedules.

CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE. New Industrial Gas Rates, Effective April 1, 1915.

There has been a tendency for a long time to abolish the straight line meter rate for gas service. The change in gas rates has in general taken the form of meter rates with block discounts. The new industrial gas rate adopted by the Baltimore Company has, however, taken the form exactly corresponding to demand rates for electric service and is the most important advance in the establishment of demand rates for gas service since Mr. Doherty established his system of charging in Denver and other cities in 1900. The fixed costs in the following schedule correspond to the demand charge for electric utilities and the running costs correspond to the energy charge.

#### INDUSTRIAL GAS RATES—GENERAL SERVICE.

Gas for industrial uses in specified locations will be sold under this schedule to any customer who has signed an agreement for Permanent Gas Service, for a term of three years, embodying the terms and conditions of the company.

##### Rate.

##### Fixed Costs.

\$204.00 per year, payable in monthly installments of \$17.00, for the first 300 cubic feet of demand or fraction thereof.

\$48.00 per year per 100 cubic feet of demand, payable in equal monthly installments of \$4.00 for that part of the demand that is in excess of 300 cubic feet.

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EDITORIAL NOTE.—All indented matter is direct quotation.

Plus—

**Running Costs.**

70 cents gross or 60 cents net per 1,000 cubic feet for all gas supplied, up to and including 20,000 cubic feet per month.

45 cents gross or 35 cents net per 1,000 cubic feet for all gas supplied exceeding 20,000 cubic feet per month, up to and including 1,000,000 cubic feet per month.

40 cents gross or 30 cents net per 1,000 cubic feet for all gas supplied exceeding 1,000,000 cubic feet per month.

**Demand.**

The demand is the maximum rate of use and is defined as the greatest number of cubic feet used in any one hour, and shall be specified in the contract. The specified demand shall be subject to revision by actual measurement of the Customer's maximum hour's use by suitable instruments furnished by the Company. The demand having been thus established, shall not be substantially decreased during the term of the contract, but shall be increased in accordance with and for all billing after any increase in maximum use which may from time to time occur. Upon extraordinary occasions for a certain limited period, the Company may, at its option, give permission to exceed the determined maximum rate of use by a stated amount without increasing the established demand upon which charges are based.

**Prompt Payment Discount.**

The net prices above specified, result from, and depend upon, a discount of ten cents per 1,000 cubic feet from the specified gross prices given only for payment of bills within ten days from the date of the reading of the meter.

**Lamp Service.**

No maintenance or supplies of any kind will be furnished by the Company under this schedule.

**Term of Contract.**

Agreements will continue in force for repeating periods of one year each, unless terminated by the customer or the company by thirty days' written notice, before the termination of the original term or the termination of any year thereafter.

**Terms and Conditions.**

**Non-Peak Service.** For installations in which the use of gas is considerably less between the hours of 5.00 p. m. and 7.00 p. m., during the period from October 1st to the succeeding March 1st, in each year, than at other times, the specified demand or the demand upon which the rate is based may be taken as the measured rate of use occurring during any hour between the said hours in the said winter months; provided, that the demand shall in no event be taken as less than one-half of the maximum measured rate of use at any other time, the use under such conditions being classified as "non-peak."

**Meters.** Not over two meters will be furnished by the company at its expense at any one contract location under this schedule, unless installed for the company's convenience. Additional meters will be furnished at a rental of \$2.50 per month each, for meters on which demands are determined and at a rental of \$1.00 per month each for sub-meters. All meters referred to herein are of the standard type and sizes of gas meter and recording meter heretofore in general use; should the conditions in any instance call for different standards, the company shall have the right to revise its Fixed Costs and its meter charges specified herein accordingly.

**Collective Application.** This schedule will apply to one contract location only. Where one person, firm or corporation is engaged in commercial or industrial business at more than one location, one contract may be made under this schedule for the supply of gas to the said several contract locations, for a term of not less than five years, under the following conditions:

The Fixed Charges for each location shall be based solely and individually upon the separate demands of said locations; and the Running Costs for all locations shall be based upon the aggregate gas consumption at all locations covered by the contract. One bill shall be rendered monthly, based upon the meter readings taken at approximately monthly intervals on such days each month as the Company may elect.

**Change of Rate.** In case the Schedule upon which any contract is based should be modified to give any customer a lower rate for like service under like conditions during the period of said contract, the customer using service under said contract shall be given the full advantage of such modification from the date of putting such modification into effect for any service.

## COMMISSION DECISIONS

### WISCONSIN

#### 840—Public Operation.

CITY OF NEENAH V. WISCONSIN TRACTION, LIGHT, HEAT & POWER COMPANY, Asking for Authority to Purchase Current at Respondent's Substation For Resale to Customers. Decision of the WISCONSIN RAILROAD COMMISSION, Dismissing the Petition. January 28, 1915.

The city alleges that respondent's rates for electric service are unreasonable. But, before taking up the immediate determination as to the reasonableness of the rates, the city asks for a ruling of the Commission upon a proposed arrangement with the company, whereby the city may purchase energy from the company and resell to the consumers. The current which is distributed in Neenah is generated at Appleton and is transmitted over a 2,200 volt line to the Neenah substation.

"The respondent company has a form of rate schedule on file which is commonly referred to by rate technicians as a Hopkinson demand rate. In addition to this rate, it has an increment or so-called limiting schedule, which limits the price per unit of product. The latter rate is designed to insure non-prohibitory per unit charges to short hour users of electrical energy. The city wishes to purchase from the respondent all of the current now used for any purpose within the City of Neenah and to resell the same to the individual consumers of the respondent. In other words, the municipality proposes to act as a middleman between the individual consumers and

the company. In this role, it expects to secure a low rate per kilowatt-hour by thus purchasing on an accumulative basis. This advantage it proposes to pass on to the individual electric consumers. The respondent, on the other hand, must relinquish its claim to its present consumers and refrain hereafter from selling at retail within the city. It appears that the Hopkinson demand schedule referred to above insures a lower unit rate than the increment schedule for energy taken in the quantities and under the conditions which would obtain if this arrangement could be effected. The city has asked this Commission to ratify this particular schedule as reasonable and equitable under the circumstances. . . .

"Inasmuch as the Hopkinson rate applies to current delivered to the customer's premises after transformation has taken place, the question immediately arises as to whether or not all of the costs have been included up to that point, and if so, whether it will be necessary for the municipality to purchase the distribution system. . . .

#### 831—Purchase by Municipality.

"It will appear, from the explanations made above, that the only question of importance to be decided is that relating to the ownership of the distribution system. In other words, the question put squarely before the Commission in these proceedings is whether the right to do a public utility business in this state is a property right, and, if so, whether such right is contingent upon the ownership of the physical property. If the municipality is permitted to effect the arrangement which it desires, its action amounts to a virtual taking away of the respondent's franchise, or, right to do business, and the assertion of ownership over that business.

"We cannot escape the conclusion that if the city acquires the right to sell directly to the consuming public at Neenah it has taken something of value from the respondent. Upon what basis such value is to be determined we do not deem it necessary to decide in these proceedings. This question becomes irrelevant when we have once settled as a fact that the right to do a public utility business in this state is contingent upon the ownership of the physical property.

#### 315.4—Franchise Value.

"That this right or franchise is property is settled. See *Joyce on Franchises*, pp. 33 to 35. Also, *Louisville & Jeffersonville Ferry Co. vs. Kentucky*, 138 U. S. 385, 394; *Central Pac. Rd. Co. vs. California* 162 U. S. 91, 127; *Metropolitan City Ry. Co. vs. Chicago West Div. Ry. Co.*, 87 Ill., 317, 324; *People ex rel Woodhaven Gas Co. vs. Dechan*, 153 N. Y., 528; *Cauble vs. Craig*, 94 Mo. App. 675. . . .

"Before the present era of regulation of public service company rates, the matter of the valuation of franchises was brought before the court in taxation and condemnation proceedings. In a number of states by statutory provision taxes were assessed on franchises

as separable items of property, and each separation was held to be justifiable by the courts. Recognition of this distinct form of value was given due, no doubt, to the large excess of the total value of the corporate property over the value of the physical elements as such.

"In Wisconsin, this distinction was never entered into by the legislature, and the Supreme Court, while recognizing the right of the legislature to so distinguish, has always held that the physical and intangible item of property should be considered as an entirety. This matter has been brought before the Court in taxation cases, and has been uniformly decided in the manner indicated above. See *State ex rel Milwaukee St. Ry. Co. vs. Anderson*, 90 Wis. 530; *State ex rel Ashland Water Co vs. Wharton*, 115 Wis. 457; *Chicago & N. W. R. Co. vs. State*, 123 Wis 553; *Fond du Lac Water Co. vs. Fond du Lac*, 82 Wis. 322; *Monroe Water Works Co. vs. Monroe*, 110 Wis. 11; *Yellow River Imp. vs. Wood Co. and another*, 81 Wis. 554. . . .

"In *Chicago & N. W. R. Co. vs. State*, 125 Wis. 553, the Court decided that the value of railway property for taxation purposes was not to be considered as an addition of physical to intangible value, but the value of the property as a unit. In *Washburn vs. Washburn W. W. Co.*, 120 Wis. 575, 585, the Court, after referring to a number of cases in which this question had been considered, said:

" . . . An examination of these and other cases decided here, that might be referred to, shows that it has been as firmly established as anything can be by judicial determination, that all the property of a public service corporation, such as appellant, street and other railway companies, and public lighting companies, whether real, personal or mixed, in the ordinary sense of those terms, including franchises other than the mere right to be a corporation, is one entire indivisible thing; that all the parts partake of the nature of the franchise from which springs the public duty, and as that is deemed to be personalty, all should be regarded as such. In that view it would be the height of absurdity to consider value and impose a tax upon one part of such entire thing separate from the rest. There can be no separation without destruction. Therefore, the separate value of the parts in the aggregate would not necessarily approximate to or be any legitimate measure of the value of all the parts, viewed as one complete machine, so to speak. The franchise by itself would be valueless. The plant in its parts as realty and personalty, according to the character thereof, irrespective of the combination of all into one entire thing might be of little value, and probably would be, as compared to what they would represent in the new form produced by the union of many parts into one. . . ."

"This Court has as uniformly held that the legislature might direct that a separation be made between tangible and intangible items of

property. See *C. M. & St. P. Ry. vs. Janesville*, 137 Wis. 7, 10; *Yellow River Imp. Co. vs. Wood County* and another, 81 Wis. 554, 560, 562.

"The legislature, however, has expressed itself as favoring the treating of the property as an entirety. Section 1037a of the statutes enacted in 1898 gave expression to the legislative intent. When the tax statutes were revised in 1913, this policy was made applicable to all water, light, heat and power companies. (See section 51. 43, of the statutes of 1913 at page 845.) In both of those sections the assessors are directed to treat all property, rights and franchises, 'together with all real estate used in such business and necessary to the prosecution thereof,' as personal property and to value and assess such property as a *single item*.

#### 831—Purchase by Municipality.

"When the public utility statutes were enacted in 1907, this Commission was directed to ascertain, in both municipal purchase and rate cases, the actual value of all the property 'used and useful for the convenience of the public.'

"The Supreme Court of the State has interpreted the intent of the legislature as expressed in the Public Utility statutes as against the separation of tangible and intangible elements in municipal purchase and other cases. In connection with the indeterminate feature of the law and the assignability of the same, that court said, in *Calumet Service Company vs. Chilton*, 148 Wis. 334, at page 352:

" ' . . . The Wisconsin Electric Service Company as found, on the 21st day of December, 1907, became the owner of a 'license, permit or franchise,' call it what we may, from the State, characterized in the public utility law as an indeterminate permit, of the scope, as regards the privilege feature, of the Bink franchise, as herein determined. The physical things in use in connection therewith, and the existing business to which the privilege was referable, all became by operation of law, merged in the single thing, the public utility property. The franchise, in such circumstances, is the principal thing and, in general, is inseparable from the rest. The latter really partakes of the nature of the former.'

"In the *Appleton Water Works* case, which involved the matter of municipal acquisition, the same Court, in connection with the allowance made by this Commission for the Going Value of the plant, said:

" ' . . . The value of the plant and business is an individual gross amount. It is not obtained by adding up a number of separate items, but by taking a comprehensive view of each and all of the elements of property, tangible and intangible, including property rights, and considering them all not as separate things, but as inseparable parts of one harmonious entity and exercising the judgment as to the value of that entity. . . . ' *Appleton Water Works Co. vs. Railroad Commission*, 154 Wis. 121, 148.

**112.1—Indeterminate Permit.**

“Under the public utility law a municipality can only terminate a franchise or indeterminate permit when it determines to acquire the plant of the public utility, and then it must pay just compensation for the property as a going concern.

“Even if the city could lawfully condemn the franchise of the company, it would not be benefitted thereby to any material extent. As the franchise is essential to the operation of the property, any damage for taking such franchise separate and apart from the property would, under any valid law, result in requiring the municipality to pay the difference in the value of the property, including the franchise before and after the taking of the franchise.

**315.1—Going Value.**

“The fundamental proposition is that something of value is being taken from the respondent. It has built up, at some expense, no doubt, a somewhat profitable business in the locality under review. If the city acquires the business thus built up, what is to become of the so-called going value to which the respondent is entitled by the ruling of practically every court which has passed upon the question.

“The city may argue that this will still attach itself to the physical property of the company, and inasmuch as the city proposes to buy current at wholesale rates from the same utility, its value will not be in any way affected. We do not see how such can be the case.

The city, in its proposed action, will receive the business of the company in the way of an established retail market for the sale of current. It obligates itself to buy current from the respondent, in case a satisfactory contract can be entered into, only for a term of ten years, according to its plans as represented in a letter under date of November 4, 1914. What becomes of this element of value at the end of the ten year period should the city decide not to purchase from the respondent any longer? The respondent would have no right of action. It has relinquished all its right to do business in the City of Neenah as soon as it has relinquished its franchise. Even its distribution system might be of little value, for, apart from its franchise privileges, it has no right to the use of the streets of the city, and could be ordered to remove its poles at great loss in value at the end of the ten-year period.

**340—Rate of Return.**

“But even granting that such an arrangement could be effected the city, in order to net the respondent a reasonable return on its Neenah business, would have to pay interest, taxes and depreciation on all the property devoted to the public use in that city, plus the actual cost of delivering current to that place. No advantage would accrue

to the city which could not be secured by filing with this Commission a request for an investigation into the reasonableness of the rates of the respondent.

"The city, in these proceedings, has started with the wrong assumption. Merely because there are two rates on file, one of which gives a lower per unit charge for certain classes of business than does the other, the assumption is not warranted that either rate is reasonable for all classes of business. The reasonableness of any rate for any class of service must be tested according to the principles which have been explained many times by this Commission.

"The most vital of these principles are that the utility furnishing the service shall receive an adequate return upon its property, and that the consumer shall receive his service at a reasonable rate.

"We do not deem it a part of these proceedings to test the reasonableness of the respondent's rates at Neenah. We can only point out that the city, when computing the net revenue under the Hopkinson schedule, neglected the most important feature of public utility rate making—the diversity factor. The rate referred to makes a charge for the demand *at the consumer's premises*, and is not designed for the accumulation of demands at the Neenah substation. Nor is the output feature of this schedule designed so as to permit of cumulative billing. The fact that the total of all of the consumer demands is larger than the demand at the substation will mean a considerable shrinking in the respondent's revenues. Inasmuch as the question of rates is not up for consideration, we do not feel justified in arbitrarily enforcing such a decrease in the earnings of the Company. Furthermore, it has always been the policy of this Commission to thoroughly investigate such matters before reaching any conclusion as to rate adjustments. . . .

#### **831—Purchase by Municipality.**

"We conclude, then, that it is not possible for the city to acquire the business of the respondent without purchasing all of the property used and useful for the carrying on of Neenah business. Neither does it appear advisable for the city to effect this arrangement for no economies will result.

"Time has not permitted us to go into the question of the difficulties which would be encountered by the separate ownership of plant and business. Needless to say they would be many. Such an arrangement could only result in grave differences of opinion between city and company, principally in matters pertaining to extension of lines. Such differences usually result in constant litigation and, for this reason, should not be encouraged.

#### **800—Municipalities.**

"We have pointed out the limitations which will be imposed upon the city in the acquirement of the plant and business of the respond-



ent. It will probably be in point to note what course of action is open to the city under the statutes. This matter may be quickly disposed of.

"The public utility law provides these remedies for municipalities when dealing with public service corporations: 1. They may elect to purchase the property used and useful to the operation of these utilities; 2. They may apply to this Commission for a certificate of necessity and convenience to allow a second or competing utility to enter their boundaries; 3. They may apply to this Commission for an order prescribing reasonable rates.

"Contrary to public opinion generally, these provisions of the statute afford as adequate remedies as were afforded to municipalities previous to its passage. The state policy has been shifted, however, so as to place more emphasis on the adjusting of rates than on the introduction of competition. The full intent of this feature of the statute is ably presented in *Calumet Service Co. vs. Chilton*, 143, Wis., 334.

"Stipulation was made at the time of the hearing that, if this Commission should decide adversely to the city, it should proceed immediately to an investigation of the reasonableness of respondent's rates. Accordingly, a notice of investigation of such rates is being sent to both parties in this case."

## **PENNSYLVANIA**

### **132—Protection From Competition.**

Petition of the BOROUGH OF AVOCA For a Certificate of Public Convenience and Necessity Approving Franchise Contract and Lighting Contract With The Avoca Borough Electric Light Company. Decision of the PENNSYLVANIA PUBLIC SERVICE COMMISSION, Dismissing the Petition, January 21, 1915.

The Scranton Electric Company has been furnishing electric service in the Borough of Avoca including the supply of energy for street lighting. Prior to the expiration of the street lighting contract held by the Scranton Company, the Borough of Avoca advertised for bids for supplying this service and the Avoca Borough Electric Light Company offered rates somewhat lower than those bid by the Scranton Company and an ordinance was passed directing that the Borough enter into a contract for lighting its streets with the Avoca Borough Electric Light Company for a period of five years. An ordinance was also approved, granting the same company a franchise for furnishing light, heat and power. The Borough of Avoca applied to the Commission

for approval of this contract and ordinance. The Scranton Company entered a protest alleging that public convenience and necessity does not require a second company to enter the field which plaintiff is already serving. The Commission says:

“Upon this state of facts, the Commission is unable to find that the approval of the proposed contract is ‘necessary or proper for the service’ of the public or is likely to be of permanent benefit to the people of Avoca. This Borough is not of sufficient size to sustain two systems of supply profitably. On the one side is a well-established and long maintained system, with the facilities and the financial ability to furnish an adequate supply. On the other is a recently organized partnership with no plant, which has offered to supply light, heat and power for a less sum, but so far as the testimony shows, without any of the means which would enable it to carry out its contract. Any failure on the part of the protestant to furnish a proper supply or any charge of unreasonable rates, if supported, is a matter which can be corrected by the Commission upon its presentation to them. . . .

“For these reasons it is the opinion of the Commission, that the proposed contract ought not to be approved, and that its application ought to be dismissed. An order will accordingly issue.”

## CALIFORNIA

### 226.5—Extension of Service.

Application of the PACIFIC GAS AND ELECTRIC COMPANY For the Approval of Agreement for Extension of Service. Decision of the CALIFORNIA RAILROAD COMMISSION, Approving the Terms of the Agreement, January 13, 1915.

The contract which the company asked to be approved provides for the extension of the company's lines to serve certain consumers. The consumers are to furnish part of the necessary new construction and to guarantee an annual minimum payment to the petitioner. It appears that the new consumers would not furnish adequate revenue on the proposed extension at the company's regular rates. The Commission approves of the contract in question, but defines its position as follows:

“While I am of the opinion that under the circumstances of this particular case it may not be fair to petitioner to require that this

service be undertaken entirely at petitioner's expense, I wish it to be distinctly understood that this Commission does not consider it necessary or possible that each service extension shall be uniformly profitable, or that there be no unprofitable extensions. Inasmuch as rates for electric service are made for average conditions, it must be perfectly obvious that, if the rates for a given class of service are as a whole remunerative, these rates must provide for both that business which is more profitable and that which is less profitable than the average. The extremes in either direction undoubtedly include business which is so profitable as almost to warrant a special classification at lower rates and business which is, temporarily, at least, an actual burden upon other consumers of the same class. In view of these facts, it will be evident that, if all unprofitable business is to be eliminated, the rates which may have been reasonable theretofore must be reduced, to compensate for the reduced cost of service."

## REFERENCES

### INVESTMENT AND RETURN

#### 310—Valuation.

APPRAISEMENT OF SMALL ELECTRIC PROPERTIES, by EDWIN D. DREYFUS. 5½ pages (Continued). *Electrical Review and Western Electrician*, March 6, 1915, p. 433.

The writer emphasizes the importance to a public utility company of having a valuation of its property prepared and kept up-to-date. If a company can afford to employ or retain experts on this work, it would be obviously desirable in all cases. If a company is adverse to incurring expense for a valuation until the necessity arises, it should at least proceed with a careful and complete inventory of its property, with adequate arrangement to make the inventory perpetual or cumulative and with a fair understanding of what constitutes unit costs. The article proceeds to outline a method to be followed in the making of such an inventory.

#### 313—Unit Prices.

UNIT COSTS, by W. F. SLOAN. Read Before the Annual Convention of the National Independent Telephone Association, Chicago, February 3 to 5, 1915.

The selection of unit costs to be used in determining the original cost or the reproduction cost new of a public utility property is discussed. Any general basis for making up unit costs must be adapted to the conditions governing in any particular

case, and must be further modified to reflect the general trend of prices in any particular class of property. The most important factors which must be considered in the preparation of comprehensive unit costs are discussed under the following headings: selection and inspection of material (including traveling expenses); freight and transportation; handling, cartage and storage; distribution and installation; testing; and restoration of premises.

## **PUBLIC SERVICE REGULATION**

### **252—Commission Annual Reports.**

REPORT OF THE NEW YORK PUBLIC SERVICE COMMISSION (1D), For the Year Ending December 31, 1913, Volume 1, 1,200 pages.

A summary of the Commission's work for the year 1913 is given in this report together with the usual information and data contained in the annual reports of this Commission.

Appendix F gives in full the report on Public Service Regulation in Great Britain, by Robert H. Whitten, which was reported in 5 RATE RESEARCH 61.

### **226.5—Standards of Service.**

ANNUAL REPORT OF THE DIRECTOR OF THE BUREAU OF STANDARDS TO THE SECRETARY OF COMMERCE, For the Year Ending June 30, 1914.

The report contains an account of the work of the electrical department of the Bureau of Standards. The electric department has been conducting laboratory work and testing, and has furnished information to the government, to various associations and to the public. The department has been of assistance in the working out of definitions, in the making of various tests, and in the fixing of standards for gas and electric service. In regard to the requirements imposed upon electric light and power companies, the report says:

"As the requirements that can fairly be made vary under different conditions, and as there has been relatively little experience so far in the enforcement of some of these requirements, there is ample room for study by the Bureau, this study including consultation with a great many operating companies and the collection of results obtained under various kinds of regulatory ordinances.

"The feasibility of making requirement of this kind in the case of the smaller utilities is a question deserving careful study. The extent to which automatic voltage regulators, recording voltmeters, pressure wires and instrument and meter-testing outfits can be utilized by such small companies without undue hardship, and possibly a resulting detriment to their customers, is a question of great practical importance and we are planning to give considerable attention to it during the next fiscal year."

### **782—Lamp Efficiency.**

GLARE AS A FACTOR IN STREET LIGHTING, by ARTHUR J. SWEET, 5 pages, *Electric Review and Western Electrician*, March 6, 1915, p. 439.

An account is given of the extensive research into the question of "glare" as a factor in street lighting which was conducted during the summer of 1914, at Mad-

ison, Wisconsin. The work was carried on under the direction of the Wisconsin Railroad Commission with the co-operation of the electrical engineering department of the University of Wisconsin.

## **MUNICIPALITIES**

### **840—Public Operation.**

GOVERNMENT INSURANCE, Editorial. *The Economist*, March 6, 1915, p. 394.

The editorial comments on the experience of the government in conducting a war risk insurance bureau, and raises the question as to how far it is advisable for the government to undertake private enterprises. The government took risks on vessels crossing the ocean at lower rates than experienced underwriters considered legitimate and has incurred the loss of the bulk of the bureau's earnings. The writer says:

"The competition of the government with private enterprise has not been serious in this instance but one might imagine many lines of business in which cruel losses would be inflicted. There was a possible reason for the entry of the government on the express business, costly as it has been to the companies, but it is about time for the country to return to the primary ideas on that subject. We are in danger of running into many grave abuses."

## **GENERAL**

### **910—Promotion and Growth of Business.**

THE USE OF ELECTRICITY ON ONTARIO FARMS. 2 pages. *Commerce Reports*, March 4, 1915, p. 886.

In connection with the hydroelectric development under the Hydroelectric Commission of the Province of Ontario, the Provincial Legislature passed a law, entitled "The Power Commission Act," the object of which was to facilitate the distribution of electrical energy among the rural districts. The Commission instituted an extensive educational campaign bringing to the attention of the farmers the benefits to be obtained from the use of cheap electric power on the farm. The demand for this class of service has increased rapidly, and the economy in the use of electric current as compared with other power on the farm has been demonstrated. The report states that the scarcity of farm labor in Ontario which has been aggravated by the withdrawal of many young men from farm work for military purposes, has naturally caused the farmer to inquire into other sources of power to assist him in his work, and the successful use of electricity by the farmers of lower Ontario has induced others to consider the utility and economy of such installation.

## COURT DECISION REFERENCES.

### 242.3—Subpoenas and Witnesses.

UNITED STATES V. SKINNER ET AL. Decision of the UNITED STATES DISTRICT COURT, S. D., NEW YORK, December 31, 1914. 218 Federal 870.

The question is discussed, in this case, as to whether or not witnesses testifying before the Interstate Commerce Commission can claim immunity under the provision of the Interstate Commerce Act which reads:

"But no person shall be prosecuted or subjected to a penalty or forfeiture for or on account of any transaction, matter or thing concerning which he may testify or produce evidence, documentary or otherwise, before said Commission, or in obedience to its subpoena, or the subpoena of either of them, or in any such case or proceeding."

The court held that the provision was enacted to make available testimony that was unavailable because of the privilege of silence conferred by the terms of the fifth amendment to the Constitution.

"In view of the purpose of Congress in enacting the Immunity Act, viz., to make available compulsory incriminating testimony, and to remove the obstacle to the use of such testimony, and in view of the fact that the only obstacle to the disclosure of such testimony that needed removal was that presented by the fifth amendment, and that it applied only in favor of witnesses who assert their constitutional privilege, and so are in the attitude of being compelled to testify, and does not apply to those who testify without asserting their privilege, and who are in the attitude of voluntary witnesses, I think the immunity should be limited to the class of witnesses in whose favor alone the obstacle existed, i. e., those who assert their privilege to decline to answer upon the constitutional ground of a tendency to incriminate."

### 831—Purchase by Municipality.

CITY OF DES MOINES V. DES MOINES WATER CO. ET AL. Decision of the IOWA DISTRICT COURT, 218 Federal 939.

The City of Des Moines instituted a condemnation proceeding for the purpose of acquiring the water plant of the respondent company. The condemnation court, which fixed the value of the company's plant, fixed the time for the payment by the city and the taking over of the property of the company. The city failed to secure the necessary authority for the issuance of bonds for the purchase of the property, and applied for a modification of the condemnation decree and for an extension of time for payment. The statutes of Iowa do not fix the time within which the amount of an award in a condemnation proceedings must be paid. The court holds:

"There can be no doubt that, in the absence of statute, the court, by agreement or otherwise, may fix the time of payment at the time of the judgment; and, when it does so, the time fixed and incorporated in that judgment becomes as much a part of it as the award itself.

"If, then, the judgment in this respect is final, no change or modification can be made, after the term in which it has been rendered, which may substantially vary or affect it in any material thing."

"We may well conceive that certainty as to the time of performance and of the enjoyment of the amount awarded may be of material importance to the defendant company. The reasonableness of the award itself may depend, in some substantial measure, upon the time of its payment."

The application for an extension of time is denied.

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CONTENTS	Page
<b>COMMISSION DECISIONS</b> .....	387
Idaho.....	387
California.....	389
Massachusetts.....	390
Wisconsin.....	393
<b>COURT DECISIONS</b> .....	395
Wisconsin.....	395
<b>REFERENCES</b> .....	397
Rates.....	397
Investment and Return.....	397
General.....	399
Court Decision References.....	399



# Rate Research

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Vol. 6

CHICAGO, MARCH 18, 1915

No. 25

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## COMMISSION DECISIONS

### IDAHO

#### 720—Rate Schedules.

Reduction, on the Commission's Own Motion, of Rates Now Charged by Certain Electrical Corporations Operating in Southwestern Idaho. Decision of the IDAHO PUBLIC UTILITIES COMMISSION. February 27, 1915.

"From an examination of the schedules on file with the Commission, it appears that the Idaho-Oregon Light & Power Company, and the Idaho Railway Light & Power Company, electrical corporations, furnishing current for lighting, heating, power and other purposes in certain cities, villages and communities in southwestern Idaho, to-wit: Eagle, Star, Middleton, Parma, Emmett, New Plymouth, Payette and Woiser, and adjacent and intervening territory, are charging rates which are excessive and discriminatory as compared with rates paid by other cities, villages and communities in the State of Idaho, similarly located, and, it appears from the location of the power sites and transmission lines of said electrical corporations that there is no reason why the rates and charges made by them for residential and commercial lighting and for domestic cooking in said cities, villages and communities, should not be reduced so as to eliminate the apparent discrimination."

The Commission concludes that the corporations should be required to file with the Commission and put in effect a new schedule of rates for the above cities and villages, that will be more reasonable and will eliminate the apparant discrimination. The Commission finds that the rates, given below, afford substantial reductions in the rates now in effect, would eliminate the apparent discrimination and would be reasonable.

The Companies are ordered to put the new rates in effect as of April 1, 1915, or appear before the Commission and show cause on or before March 20, why they should not be required to file and establish this schedule of charges for the places above mentioned.

### **COMMERCIAL AND RESIDENCE LIGHTING.**

#### **Rate.**

- 9 cents per kilowatt-hour for the first 20 kilowatt-hours of current consumed per month.
- 8 cents per kilowatt-hour for the next 30 kilowatt-hours of current consumed per month.
- 7 cents per kilowatt-hour for the next 40 kilowatt-hours of current consumed per month.
- 6 cents per kilowatt-hour for the next 50 kilowatt-hours of current consumed per month.
- 5 cents per kilowatt-hour for the next 100 kilowatt-hours of current consumed per month.
- 4 cents per kilowatt-hour for the next 200 kilowatt-hours of current consumed per month.
- 3 cents per kilowatt-hour for the next 500 kilowatt-hours of current consumed per month.
- 2 cents per kilowatt-hour for all additional current consumed per month.

#### **Minimum Charge.**

\$1.00 per month per meter.

#### **Delayed Payment Penalty.**

Ten per cent (10%) penalty added if not paid on or before the 10th of the month following that in which the service is rendered.

### **DOMESTIC COOKING.**

The domestic cooking schedule applies only when the connected heating load in cooking appliances equals or exceeds 2,000 watts, and when such is the case, small heating and single phase motor appliances, irons, fans, etc., may be used on the same circuit at these rates, but cannot be considered as a part of the connected heating load.

#### **Rate.**

- 3 cents per kilowatt-hour for the first 50 kilowatt-hours of current consumed per month.
- 2½ cents per kilowatt-hour for all over 50 kilowatt-hours of current consumed per month.

#### **Minimum Charge.**

\$1.00 per month per meter.

#### **Delayed Payment Penalty.**

Ten per cent (10%) penalty added if not paid on or before the 10th of the month following that in which the service is rendered.

**CALIFORNIA****224.5—Rates Fixed by Contract.**

Application of the HALF-MOON BAY LIGHT AND POWER COMPANY for Permission to Increase Certain Contract Rates. Decision of the CALIFORNIA RAILROAD COMMISSION, Authorizing New Rates, November 27, 1914.

The Half-Moon Bay Light and Power Company applied for authority to increase the rates at which electric energy is supplied to E. B. and A. L. Stone Company. Electric energy is at present served by the Power Company to the Stone Company under a contract entered into for a term of six years. The decision says:

"In asking the Commission to authorize applicant to charge the Stone Company rates in excess of those specified in the contract, applicant alleges that the contract rates are noncompensatory; that they do not pay the actual out of pocket cost incurred in supplying electric energy to the Stone Company; that the contract was made with a misunderstanding of its effect and that the power company would never have entered into the contract had it realized that the rates therein specified were noncompensatory. The Stone Company appeared in opposition to the application, claiming that it has, at great expense, in reliance upon this contract, altered its plant from a gas engine installation to an electric service; that a raise in the contract rate will require an abandonment of this electric service; that contracts have been made for the sale of rock and sand at prices which were based on the existing contract rate for power; that the contract for power was made at arm's length, and that it will be a great hardship on the Stone Company if the power company is allowed to increase its rates as requested.

"This Commission has jurisdiction in proper cases to alter or modify the rates at which a public service company has contracted to supply service. If the contract rates are unreasonably high, the Commission has the power to direct that service be supplied at a less rate. Likewise, if the contract rates are unreasonably low, the Commission has the power to authorize an increase in those rates. The Commission will, however, be slow to alter a contract rate, when the contract has been entered into at arm's length and in absolutely good faith. In such cases it must be conclusively established that the contract rate is either noncompensatory or excessive. In the present proceeding the equities of the parties are before the Commission and are unquestionably in favor of the Stone Company. So far as proper this fact will be given consideration in determining the rates to be charged that company. No individual rate should be allowed to stand, however, if it is so low as to unjustly burden the remaining consumers."

The Commission establishes new rates for the service which are an increase over those fixed by the contract, but are lower than the rates applied for by the power company.

## MASSACHUSETTS

### 300—Investment and Return.

NORTHAMPTON GAS PETITION. Decision of the MASSACHUSETTS BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS, Fixing the Maximum Price of Gas Sold by the Northampton Gas Light Company. January 30, 1915.

A complaint by the mayor of the city of Northampton alleged that the price of gas of the Northampton Gas Company is unreasonable. After considering the valuations submitted, proper allowances for operating expense and rate of return, the Board recommends a reduction in the maximum net price from \$1.10 to \$1.00 a thousand cubic feet.

### 310—Valuation.

Both parties submitted valuations, which are briefly reviewed by the Board.

### 311—Basis of Valuation.

The Board discusses the question of a proper rate making basis, as follows:

“Under some circumstances the market value of the company’s stock might offer an indication of the value of its property. In this case, however, ever since the purchase of its stock by the Massachusetts Lighting Companies in 1910 at a large premium, the stock has been withdrawn from the market and held as one of the assets against which the securities of that association have been issued. There is consequently no present established market value for this company’s stock.

“The testimony in this case, which has been briefly and, as the Board believes, fairly described, exhibits the usual irreconcilable results reached by experts valuing property by the reproductive method in rate cases, and who of necessity realize the importance of the result to their respective employers. But if a valuation was made free from all bias, it too would have to be based upon premises and experiences open to wide range of debate. Even then its only purposes would be to ascertain a figure upon which a return might be computed, with only such aid in dealing with the rate of such return as is afforded by the demands of investors with respect to securities which, in their turn, have little or no relation to such valuation of the property which they represent.

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“There is broader, and the Board believes firmer, ground upon which the disposition of this case may properly rest. Throughout the history of this company, the laws, deliberately adopted and consistently pursued, have provided a definite scheme for the regulation of the gas companies. Its foremost characteristic has been and still is a purpose to restrict the original issue of capital stock to the actual investment made by the stockholders, to prohibit stock dividends, and to limit additional stock or bonds to such amounts only as are reasonably necessary for the purpose for which the same are authorized, and, in the case of stock, are required to realize the requisite amount of money in view of market conditions,—all with a view to keeping down the dividend burden which the public must meet in the rates charged. It cannot be successfully claimed that these laws are in themselves confiscatory, or operate to deprive the companies to which they apply of their property without due process of law or of the equal protection of the laws. Neither, in the opinion of the Board, can any sound judgment be reached of the fair return to be allowed upon a property acquired under a franchise granted and exercised under such restrictions and limitations, if their beneficial purpose is to be utterly ignored. This would be to observe one rule during the development of a company’s capacity to provide adequate service at reasonable rates, and to test its effect by another and quite inconsistent rule. And yet, obviously, this may be the result if valuations are relied on as the sole primary and determining factor in rate cases.

“A reasonable return under a policy so clearly declared and long continued is not perhaps susceptible of an absolute determination, and may be such an amount to be realized from the conduct of the business as, after providing for all other necessary and proper corporate requirements, will permit a reasonable dividend to the stockholders. The reasonableness of such return is to be related not merely to what may be regarded as the value of the property but to the legitimate capital stock outstanding and representing such property, whose value is usually appreciably greater or less than the par value of the capital stock, but rarely, if ever, identical with it. Where it appears to be greater, it will be found to be due either to investment in plant out of income or to some unearned increment of value in the plant from causes arising outside of the corporation itself. The manner in which such value has been created, the policy pursued in the issue of securities, the intelligence, honesty and prudence of the management,—all have an important bearing on the amount of the return divisible among the stockholders, and of necessity will lead to apparently different results in different companies and in the same company at different times. This is the only policy, having due regard to a proper reward for efficiency, which seems to the Board to afford an effective stimulus to a recognition by managements of the common interests of both stockholders and consumers.

"It is true that courts have decided rate cases in which little or no evidence was offered save with respect to the values of the properties involved based upon their reproductive costs. But they have not yet said that this is the only test or even that the trial court or the public board, whose action is questioned, must reach and state a definite finding as to value. Other elements have been expressly enumerated as 'matters of consideration . . . to be given such weight as may be just and right in each case.' A price is to be held confiscatory, if at all, because it may fairly be expected in its effect upon the future business to operate to deprive the company of the reasonable earning power of its property. It is illogical to capitalize earning power as a test of value when the basis of earning power, the rate or price, is itself in question. But it is equally fallacious to assert broadly that cost of reproduction is the sole controlling test of earning power, especially when the price yields all that the capital employed under the restrictions and limitations, which have been described, has ever required. In this proceeding the issue is the price to be hereafter charged by this company, and the value or original cost of its property, the market value of its stock, or any of the other factors which have been considered, are important only so far as together they aid to a correct conclusion as to a price which shall be fair alike to the company and the public. Of necessity this conclusion must rest until vindicated by experience, not in a mathematical demonstration, but in the exercise of a sound judgment."

#### 340—Rate of Return.

"Since the company began making returns to the Board in 1885, it has never failed, except in 1887, when it paid 6, to pay a dividend of at least 8 per cent. In a number of years prior to 1908 dividends in substantial excess of 8 per cent were paid. In 1908 its dividend rate was raised to 10, and in 1909 to 12 per cent., a rate since maintained, with a large extra dividend in 1912. Notwithstanding these dividends, a considerable proportion of the amount expended upon additions and extensions to its plant and property during this period has been provided from the earnings. . . .

"At the hearings it was contended, in behalf of the city, that the net cost of gas supplied to customers was unreasonably high. By reductions in certain items relating to the cost of coal, office rent, management and distribution expenses, and in the allowance for repairs, renewals and depreciation, it was claimed that the cost could be so reduced that at a price of 95 cents, with no increase in output, there would still be earnings available for dividends sufficient to pay 8 per cent on the outstanding capital stock."

#### 352—Expense.

The city offered evidence to show that various items of operating expense are excessive.

"Some adverse comment was also directed in behalf of the city to the rent of the office and appliance store, but the Board sees no

reason for considering this an unreasonable operating expense, although, to the extent to which this office is used as an appliance store, the rent seems to be an expense connected with the sale of appliances, and only the net loss, if any incurred thereby, should be introduced as an operating expense, a practice which now seems to have been adopted by the company."

A table is given showing the increase in expense under the present management as compared with the expense for former years.

"It is doubtless true that while this comparison is not conclusive evidence that the company's present operating expenses are excessive in this respect, yet it throws the burden upon the new management to justify the increase. The Board is of the opinion that this burden was not sustained, and its investigation makes clear that not only are these costs higher than experience shows is necessary for skillful and efficient management, but that the association, by the device of the management company, is in fact making an unwarrantable profit on the services of those actually engaged in the management of the Northampton Company. The Board, in a similar situation, has observed that 'the management, if it desires, may choose between profits and a high operating cost, and only the stockholders are interested as to whether a certain amount of income is retained for dividends or expended for management. But even if the public be not interested in the apportionment of a given sum between dividend and management cost, yet they have clearly an interest when the combination of such costs is unreasonably high.' By the arrangement now in force it is also to be noted that, so far as management costs are concerned, no decrease in unit cost follows any increase in output. Full advantage of such decrease goes to the owners of the property and none to the public. In reaching its conclusions as to price the Board has been influenced by the opinion that a substantial reduction in this feature of the operating expenses should be made or the company should suffer a corresponding deduction in the return allowed."

## **WISCONSIN**

### **831—Purchase by Municipality.**

Determination of a Just Compensation to be Paid to the JANESVILLE WATER COMPANY, by the City of Janesville, for the Property of the Company Actually Used and Useful for the Convenience of the Public. Decision of the WISCONSIN RAILROAD COMMISSION, Fixing the Terms and Conditions for the Transfer of the Company's Property to the City. January 30, 1915.

In a proceeding before the Commission to determine the value of the

Janesville Water Company for the purpose of acquisition of the property by the City of Janesville, the Commission says:

"In connection with the purchase of the property of the Janesville Water Company by the City of Janesville, it is necessary that the Commission give consideration to all lines of evidence which tend to show what is the fair value of the property. The value to be fixed must be the value of the going concern, and not the value of the physical plant, as an entity distinct from the business in which the company is engaged. To determine this fair value, consideration must be given to such elements as the value of the physical property, the going value, the cost of securing money, etc."

### 315—Intangibles.

Under intangible values the Commission discusses the proposed allowance for going value and discount on bonds.

#### 315.1—Going Value.

"There are various lines of evidence which should be considered in determining the allowance which should be made for going value, among which the more important are probably the extent of accumulated losses actually incurred in building up the business and the probable cost which would have to be incurred in an equivalent plant in building up the business to the point of a reasonable return."

The table prepared by the Commission's auditor is given in the discussion, showing the estimated rate of return received by the company, which ranges from 4.3% for 1892 up to 11.2% for 1913 and 11% for the first six months of 1914. Without drawing definite conclusions from the financial history of the company as to the losses incurred, the Commission says:

"There can be no question that it would cost a considerable amount to build up a business under conditions similar to those prevailing in Janesville, but where a new utility was to be installed to meet a hitherto unsupplied demand for service, to the point where a reasonable return would be earned upon the investment. To determine how much this cost would be is a matter of estimate. From such information as is available on this subject, it seems that the cost of building up such a business would probably be between 5 per cent and 15 per cent of the total value of the physical plant, and consideration may well be given to this fact in fixing upon the final value of the property.

"The company claims an allowance for going value of about 20 per cent of the actual investment, with an overhead allowance of 15 per cent included in the investment. We see no reason for any extended discussion of this claim, as the amount of going value which should be allowed should be determined as largely as possible from the evidence presented in each particular case, and we find nothing in the record in this case which would justify as large an allowance as that claimed by the company."



**315.5—Bond Premium.**

"With regard to discount on bonds, the Commission has taken the stand that it may be reasonable to recognize this element where the discount is a normal and reasonable cost of getting money to finance a utility, where the utility is needed in the community, and where the money for financing it can be obtained on no better terms. In an earlier investigation of the Janesville Waterworks, 7 W. R. C. R., 628-639, the question of discount on bonds was considered by the Commission, and the conclusion was stated as follows: 'Some allowance probably will have to be made in fixing the value of the plant for the discount on bonds, but it is questionable whether all of the \$19,600 accounted for should be considered as a plant investment.'

"There are no facts before us in the present case which would lead us to alter the conclusion above quoted. There seems to be no reason to question the propriety of issuing bonds under the circumstances under which those in question were issued. Authorities are not by any means agreed that the discount incurred in floating bonds should be permanently charged to capital. The difficulties which would be met with if this policy were pursued in the case of refunding issues are, of course, apparent, in that the amount of discount charged to capital might eventually be entirely out of proportion to the actual value of the property. The total amount of discount on bonds which the company claims should be given consideration in this case is \$20,600, and we believe it fair to give some weight to the fact that bonds were sold at a discount to provide money for an enterprise which was reasonably necessary for the public service."

**COURT DECISIONS****WISCONSIN****224.5—Rates Fixed by Contracts.**

MINNEAPOLIS, ST. P. & S. S. M. RY. CO. v. MENASILA WOODENWARE CO. Decision of the WISCONSIN SUPREME COURT, December 8, 1914. Dissenting Opinion, January 8, 1915, 150 Northwestern, 411.

In December 15, 1899, the parties entered into a contract agreement fixing certain freight rates which, according to the wording of the contract, were to hold good as long as the respondents own their mill

at Warner, now called Ladysmith. Plaintiff claims the contract was superseded by the Wisconsin Railroad Commission law and by the tariffs filed pursuant thereto. The defendant claimed the contract is still in force and controls the price that it still should pay, and the Circuit Court decided in favor of the latter. The plaintiff appealed the case to the Supreme Court and a decision is rendered remanding the decision to the lower court. The holding of the court is, in part, as follows:

"The power to regulate the rate of common carriers is a sovereign power of the state. *Milwaukee E. R. & L. Co. v. Railroad Commission*, 153 Wis., 592; 142 N. W., 491. And every contract made as to such rates with a corporation authorized to contract in reference thereto is made with the knowledge of and subject to the right of the state at any time to resume the exercise of such sovereign power. The legislative right to supersede it is as clear as though it were written into the contract itself, for the law implies it. This was expressly held in *Milwaukee E. R. & L. Co. v. Railroad Commission*, 153 Wis., 592, 142 N. W., 491, and as there stated was involved in the decision in *Manitowoc v. Manitowoc & Northern T. Co.*, 145 Wis., 13; 129 N. W., 925; 140 Am. St. Rep., 1056; only in the latter case it was held the state had not exercised its power to act. To construe Subdivision 9 of Section 1828, R. S., 1898, as authorizing railroad companies to make contracts for rates binding upon the state when it resumes its rate-making power, would be to hold that the legislature could part with an attribute of sovereignty. This it cannot do. In a democracy, there can be no abdication. Sovereignty is not subject to a perpetual gift, grant or barter. A perpetual grant *under* sovereign power may be made, but not a perpetual grant *of* sovereign power."

Judge Marshall issued a dissenting opinion, and states his position as follows:

"I think I do not misunderstand the effect of the former decision. It is to the effect that the state possesses the sovereign power to fix the compensation which a public utility corporation may demand for service, superseding existing contracts containing all essential elements of mutuality as to promises, and even characterized by a paid consideration upon one side to be compensated for *in futuro*; that the exercise of such power does not need the aid, nor fall within the purview, of the fundamental reserved power to alter or amend corporate charges. No authority is cited to support that doctrine. It seems to rest on the idea that changed conditions may give rise to legitimate judicial modification or change of the unwritten law, and call for assertion of a principle by which the prohibition against impairing the obligation of contracts may be rendered dominant.

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"There is no point where there has been greater effort to securely intrench rights than that relating to contracts. We see that in the Northwest Ordinance, which preceded the National Constitution,

and again in the latter, in the form of a prohibition upon the power of the states, and again in our State Constitution, in the form of a limitation of legislative power.

"It is also within the broad guaranty upon which our whole constitutional fabric was constructed. There is no exception other than under the reserved power. Whatever measure of inherent power to interfere, destructively, with the obligations of contracts is possessed by the law making power, as an original matter is limited by the fundamental law the same as the police power, which at one time was thought to be above constitutional restraint.

"This case furnishes a striking illustration of the harmful effect of the new doctrine. The respondent, in effect, bought and paid for the privilege it claims. The interference is not with the power to make contracts, nor power to execute existing contracts which have been fully satisfied up to date, so that nullifying them cannot work hardship by taking away, without consideration, a valuable purchased right, but with a property right acquired, contractually, for a consideration parted with—a right which is as essentially property as any tangible thing respecting invested capital. Such property is confiscated, in fact. That is the real effect of the doctrine upon which the decision in this case is grounded."

## **REFERENCES**

### **RATES**

#### **410—Cost of Service.**

WISCONSIN COMMISSION METHOD OF RATE-MAKING, by E. N. STRAIT. 5 pages, *The Gas Age*, March 15, 1915, p. 263.

This paper on the Wisconsin Commission's method of rate-making was read before the Wisconsin Electrical Association and Wisconsin Gas Association, January 21, 1915, and was reported in 6 RATE RESEARCH 333.

### **INVESTMENT AND RETURN**

#### **310—Valuation.**

APPRAISMENT OF SMALL ELECTRIC PROPERTIES, by EDWIN D. DREYFUS. 5½ pages. *Electrical Review and Western Electrician*, March 13, 1915. Page 500.

The first installment of this article, noted in 6 RATE RESEARCH 381, outlined the

practice to be followed in the field work necessary for an appraisal of the property of electric companies. The conclusion of the article in this week's issue considers office records, unit costs, intangible values, overhead charges, etc.

### 340—Rate of Return.

EFFECT OF THE WAR ON REGULATION OF PUBLIC UTILITIES, by NATHANIEL T. GUERNSEY. 1 page. *The Gas Age*, March 15, 1915, p. 275.

The effect of the war upon the money market demonstrates conclusively the unsoundness of the contention that there is some standard return which is adequate for money invested in public utilities. It is impossible to establish any fixed rates, as 7 or 8 or 9 or 10 per cent. The practical question to be decided is what rate of return is essential in order to enable the utility to secure the new money that is absolutely necessary if the utility is to perform its functions efficiently. This rate cannot be fixed because conditions affecting the money market are not permanent, but are constantly varying. The investors determine the price which the utilities must pay for money. The regulation of public utilities will not be established upon a sound basis until these propositions are understood and recognized. The public utility cannot furnish service at less than it costs. Regulation may bankrupt some utilities, but it cannot, in the long run, obtain service for less than it costs and as a part of that cost there must be reckoned the cost of the money.

### 380—Taxation.

TAXATION OF PUBLIC UTILITIES, by DELOS F. WILCOX. 8½ pages. *Annals of the American Academy of Political and Social Science*, March 1915. Page 140.

In discussing the subject of taxation of public utilities, the writer emphasizes certain principles, which he sums up as follows:

"1. In so far as public utilities remain on a speculative basis, and continue in the enjoyment of special privileges protected by judicial decisions and contractual rights, taxation may be resorted to, both as a revenue measure and as a weapon for regaining public control over such utilities.

"2. In so far as privately owned public utilities are subject to adequate continuous public regulation as to service and rates, the principles of taxation as applied to them should be the same as the principles of taxation and profit-making applied to publicly owned utilities.

"3. Whatever revenue public bodies may derive from public utility taxes or contributions, except to the extent that such taxes and contributions may be regarded as a part of the actual and legitimate cost of service, should be used as a fund for amortizing, first, franchise and other intangible values, and, second, the capital investment in the physical property of the utilities.

"4. As the public agency theory of public utility operation comes to be more widely recognized and more fully established, the tendency will undoubtedly be to diminish and finally eliminate public utility taxes and contributions, and, *per contra*, to subsidize public utilities out of taxation, to the end that a higher standard of service may be rendered at a fixed or diminishing charge to the public."

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## **GENERAL**

### **980—Public Relations.**

**PUBLIC SERVICE**, by PROFESSOR MORRIS KNOWLES, Director Department of Sanitary Engineering and Evening Course in Public Utilities, University of Pittsburgh. Paper Read Before the Duquesne Light Company Section of the N. E. L. A., October 1, 1914.

The paper discusses the fundamental relations of a public service commission to the general public and to the utilities companies, pointing out how a commission is advantageous to both sides and how it is able to act as a mediator in the fair adjustments of disputes. What the public may hope to secure through regulation of public utilities is summed up as follows: The first and most important object to be secured is good service. Rate of charge is of relatively little importance as long as the service is good, but it is important, however, that the rate should be sufficient to pay a fair rate on the investment and permit the furnishing of a good quality of service. Other things to be desired are freedom from discrimination; rates as low as consistent with a proper return on the investment; return such as will protect the property rights and encourage exercise of energy, ingenuity and thrift in the public service, and will give good wages and working conditions for employes, such as will promote high standard of citizenship; courteous treatment of the public by employes at all times, and a thorough public-spirited attitude on the part of the company and its officials in all matters affecting the public welfare. Those things which the utility has a right to demand are: Tenure for a considerable number of years and assurance of purchase at a reasonable figure, if the public should care to take over the utility at the end of that time; opportunity to carry on and develop the business without unreasonable restriction or harassment; protection of property and security values from attacks of self-seeking politicians; protection from competition and a spirit of confidence and frankness in all matters of legislation and regulation. The progress in the different states towards proper state regulation of public utilities is discussed.

## **COURT DECISION REFERENCES.**

### **120—Protection of the Public.**

**STATE ex rel. HOWIE, Dist. Atty. v. BENSON.** Decision of MISSISSIPPI SUPREME COURT. February 15, 1915. 67 Southern 214.

The Capital Light & Power Company, which furnished electric service to the City of Jackson for a number of years, was adjudged a bankrupt. The company's assets and franchises were purchased by defendant and it is alleged that, in pursuance of a combination and conspiracy to bring about a monopoly and destroy

competition, the defendant shut down the plant and refused to perform the duty of the corporation to the public. The court holds as follows:

"He cannot hold on to the benefits of his purchase without incurring the obligation to perform the duties of the trust. This seems to be made certain when it appears that he refuses to assume the burdens, if burdens there be, because he has entered into a compact with others to do so for the purpose of creating a monopoly—of destroying competition. . . .

"There is and can be no conflict of judgment that, in proper cases, the courts will and do exercise the power to compel the performance of legal duties. The petition in this case declares a state of facts which justifies the exercise of this extraordinary power."

### 132—Protection from Competition.

BAXTER TELEPHONE CO. v. CHEROKEE COUNTY MUTUAL TELEPHONE ASSN. et al. Decision of KANSAS SUPREME COURT. February 6, 1915. 146 Pacific 324.

The Baxter Telephone Company, furnishing telephone service in the City of Baxter Springs, brought action to restrain the Cherokee County Mutual Telephone Association and others from extending their service into the territory served by the petitioner without first having secured a certificate from the Public Utilities Commission. The respondent secured a franchise from the city and proceeded to establish its system within the city limits, without having applied for or having received a certificate of convenience and necessity from the Public Utilities Commission. The court holds that the petitioner cannot maintain such a suit in its own behalf. The court says:

"Ordinarily the usurpation of a corporate privilege or public franchise can only be challenged by an action in the name of the state, by its proper officer. . . .

"By the railroad and utilities acts the power is conferred upon the attorney for the Public Utilities Commission to challenge the exercise of unauthorized corporate acts. Gen. Stat., 1909, § 7182; Laws, 1911, c. 238, §§ 2, 7; State ex rel. Attorney for Public Utilities Commission v. Wyandotte County Gas Co., 88 Kan., 165; 127 Pac., 639."

In regard to the provision of the utilities law for protection from competition, the court says:

"This the Legislature has recognized, and has provided that, as a matter of public policy, no public utility like a telephone company, excepting one strictly mutual, will be authorized to do business until it has obtained a certificate or a license of authority as a public convenience and necessity within the community where it seeks to do business. This is a part of the state's program for the regulation of public utilities, but the administration of that program, and the enforcement of the law pertaining thereto, is vested in public officers authorized to use the name of the state to carry it into execution. Prior to the passage of the public utilities act, any number of telephone companies which could persuade a city government to grant a franchise for the use of the streets and alleys, might establish a telephone system within such city. The competition of these would affect the business and affect the revenues of other utilities of the same character which had previously been established. The enactment of the public utilities law was an extension of the police power of the state over such utilities, but it did not grant any additional rights to such utilities as were established and maintained before the adoption of that act; and the Baxter Telephone Company procured no rights thereunder which it can maintain against possible competitors. The public utilities law was not enacted as an extension or enlargement of the powers and privileges of an existing telephone company."

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# RATE RESEARCH



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# Rate Research

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## CONTENTS

INDEX NUMBER	Page
Classified Index, Volume 6	403
Alphabetical Index, Volume 6	413



# Rate Research

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No. 26

## RATE RESEARCH CLASSIFIED INDEX VOLUME 6

NOTE:—The RATE RESEARCH Classification is given in full. The small numbers following certain headings refer to pages in Volume 6.

### MAIN CLASSES

- 100—PUBLIC SERVICE
- 200—PUBLIC SERVICE REGULATION—LAW AND PRACTICE
- 300—INVESTMENT AND RETURN
- 400—RATE THEORY
- 500—RATE PRACTICE
- 600—RATE DIFFERENTIALS
- 700—SCHEDULES AND SERVICE
- 800—MUNICIPALITIES
- 900—GENERAL

### 100—PUBLIC SERVICE

127

### 110—ESTABLISHMENT

286

#### 111—Incorporation

111.1—Incorporation Tax

#### 112—Franchises

160, 170, 183, 191, 203, 222, 223

112.1—Indeterminate Permits

282, 377

112.5—Ordinance Rates

#### 113—Financing

271, 319

#### 114—Eminent Domain

256, 272.

#### 115—Use of Public Highways

16, 95.

### 120—PROTECTION OF THE PUBLIC

25, 95, 170, 399

#### 121—Proper Service

170

#### 122—Just and Reasonable Charges

176

#### 129—Default in Public Service

129.1—Discrimination

129.2—Inadequate facilities

129.3—Refusal of service

347

129.4—Refunds

**130—PROTECTION OF THE CORPORATION****131—Protection from Confiscation****132—Protection from Competition**

30, 41, 67, 108, 188, 279, 283, 291, 292, 296, 312, 327, 349, 364, 379, 400

**132.1—Natural Monopolies****132.2—Fair Rates and Efficient Service**

42, 189, 199, 292, 294, 350, 364

**132.8—Unnecessary Duplication**

42, 44, 295, 364

**132.9—Development Duplication****138—Contracts**

32, 223

**139—Limitations to Service****139.9—Deposits****140—RELATIONS OF CORPORATIONS WITH EACH OTHER**

61

**141—Reorganization****142—Reincorporation****143—Co-Operation****144—Mergers**

58, 135, 237

**145—Dissolution of Mergers****146—Transfer or Lease**

282

**148—Competition****149—Holding Companies**

128, 135, 283

**149.1—Stock Ownership**

87, 89

**190—GENERAL HISTORY OF ELECTRIC UTILITIES**

159

**199—General History of Related Utilities****200—PUBLIC SERVICE REGULATION—LAW AND PRACTICE**

13, 78, 93, 128, 142, 173, 174, 284

**210 ORGANIZATION OF COMMISSIONS****211 Qualifications—Appointment****211.9 Removal of Commissioners****212 Officers****213 Employees****214 Expenses of Commissions****220 GENERAL POWERS OF COMMISSIONS**

74, 75, 76, 204

**221 Capitalization****221.1 Issue of Stocks and Bonds**

112

**222 Accounts**

12, 45, 62, 284

**222.1 Form of Accounts**

79, 240

**222.2 Audit of Accounts****222.3 Method of Keeping Accounts**

249

**223   Reports**

95

**224   Rates**

16

## 224.2   Contracts

122

## 224.5   Rates Fixed by Contract

25, 26, 122, 136, 204, 220, 302, 364, 389, 395

**225   Schedules**

## 225.1   Filing of Schedules

368

**226   Service**

## 226.1   Improvement of Service

200

## 226.2   Extension of Service

4, 24, 108, 156, 200, 310, 332, 380

## 226.3   Joint Service

## 226.5   Standards of Service

13, 23, 45, 62, 79, 128, 240, 329, 382

**227   Valuation**

94

**228   Franchises**

## 228.1   Approval of Franchises

**230   COMPLAINTS****231   Companies' Procedure**

12

**240   COMMISSION PROCEDURE**

77

**241   Investigations**

186, 206

**242   Hearings**

## 242.1   Testimony

## 242.2   Depositions

## 242.3   Subpoenas and Witnesses

384

## 242.4   Experts

30

**243   Orders**

## 243.1   Preliminary

## 243.2   Final

## 243.3   After rehearing

## 243.4   Staying of orders

## 243.5   Enforcement

## 243.6   Penalties

42, 336, 368

**244   Rehearings and Appeal**

78, 192, 224

**250   COMMISSION RECORDS****251   Publicity**

365

**252   Commission Annual Reports**

169, 211, 253 (library list), 282, 285, 352

**253   Commission Reports of Decisions**

313

**260 HISTORY AND DEVELOPMENT OF REGULATION****261 Public Service Bills**

29, 30, 128

**265 Co-operation of Public Service Companies with Regulatory Bodies****268 Public Service Laws**

12, 29

**269 Comparison of Public Service Laws****300—INVESTMENT AND RETURN**4, 19, 28, 35, 39, 40, 51, 60, 71, 73, 75, 87, 88, 101, 105, 115, 131, 134, 141, 147, 153, 180, 195, 202, 208,  
243, 252, 259, 263, 271, 343, 357, 360, 361, 390**310 VALUATION**

40, 52, 90, 109, 110, 131, 150, 173, 334, 381, 390, 397

**311 Basis of Valuation**

136, 244, 311, 390

## 311.1 Original Cost

## 311.2 Reproduction Cost New

39, 137

## 311.3 Present Value

92

## 311.4 Market Value

## 311.5 Cost plus Cost of Additions and Extensions

## 311.6 Earning Value

**312 Inventory**

288

## 312.1 Physical Property

## 312.2 Leases

115

## 312.7 Donated Property

## 312.8 Discarded Property

## 312.9 Paving over Mains

132, 151

**313 Unit Prices**

381

**314 Overhead Charges**

90, 102, 132, 141, 244

## 314.1 Promotion

## 314.11 Initial Engineering

## 314.12 Legal Expense

## 314.2 Organization

## 314.21 Incorporation

## 314.22 Franchises

## 314.23 Permits

## 314.3 Bond Discounts

## 314.4 Construction

## 314.41 Engineering

## 314.42 Administration

## 314.43 Contingencies

## 314.44 Contractor's Profit

102

- 314.45 Sub-contractor's Profit
- 314.46 Piece Meal Construction
- 314.5 Interest during Construction
- 314.6 Taxes and Insurance during Construction
- 314.7 Early Experimental Work
- 314.8 Deficit in Early Earnings
- 314.9 Special Advertising and Soliciting

**315 Intangibles**

11, 99, 133, 180, 245, 377, 394

- 315.1 Going Value  
10, 29, 40, 91, 102, 105, 142, 151, 154, 248, 264, 364, 394
- 315.2 Good Will
- 315.3 Special Contracts
- 315.4 Franchise Value  
181, 195, 198, 247, 285, 334, 374
- 315.5 Bond Premium  
151, 395

**317 Construction in Advance of Present Needs**

116, 276

**318 Working Capital**

103, 133, 142

**319 Land**

43, 154

**319.1 Water Power Rights****320 APPRECIATION****330 CAPITALIZATION**

60, 110, 139, 157, 158, 182

**331 Amount of Investment**

- 331.1 For Rate Making Purposes
- 331.2 Total Capitalization
- 331.3 Market Value of Stocks and Bonds  
343
- 331.4 Original Book Cost
- 331.5 Net Earnings Rule

**332 Notes and Other Issues for Less Than One Year****335 Issues of Stocks and Bonds****337 Stocks without Par Value****340 RATE OF RETURN**

35, 37, 40, 51, 103, 106, 117, 133, 142, 156, 198, 255, 259, 264, 358, 360, 363, 377, 392, 398

**341 Bond Interest****342 Dividends****346 Efficiency of Operation**

344

**350 TOTAL REVENUE, EXPENSE, INCOME****351 Revenue****352 Expense**

140, 250, 382, 392

**353 Income****354 Surplus**

**360 DEPRECIATION**

11, 28, 61, 99, 103, 111, 119, 127, 133, 156, 173, 250, 259, 288, 363

361.1 Wear and Tear

361.2 Inadequacy

361.3 Obsolescence

361.5 Electrolysis

44, 61, 92

**362 Accrued Depreciation****365 Annual Rate of Depreciation**

250

365.1 Straight Line Method

365.2 Sinking Fund Method

**366 Depreciation Funds**

103, 261

**369 Depreciation Tables****370 PROFIT SHARING****371 Sliding Scale of Rates and Dividends**

296

**372 Employes Profit Sharing****373 City Profit Sharing****374 Pensions, Sick Benefits, etc.****380 TAXATION**

75, 112, 153, 159, 184, 318, 335, 398

**381 City**

32, 75

**382 State****383 City Compensation****384 Federal Income Tax****390 GENERAL INVESTMENT AND RETURN INFORMATION**

127

**391 Reports of Companies**

158

**395 Proceedings of Technical Associations****399 Comparative Financial Statistics****400—RATE THEORY**

59, 78, 119, 126, 142, 239, 270, 358

**410 COST OF SERVICE**

7, 52, 71, 91, 157, 333, 397

**411 Apportionment of Expense**

411.1 Customer Charges

60

411.2 Demand Charges

411.3 Energy or Output Charges

**419 Return for Different Character of Service**

56

**450 VALUE OF SERVICE THEORY**

10, 19, 52, 72, 88, 168, 275, 302, 359

**451 Increment Costs****490 HISTORY AND DEVELOPMENT OF ELECTRIC RATE THEORY**

**500—RATE PRACTICE**

167, 218, 250, 278

**510 FORMS OF RATES**

11, 126, 142, 149, 207, 356

**511 Flat Rates****512 Consumers' Output Rates****513 Meter Basis**

513.1 Straight Line Meter Rate

513.8 Block Meter Rate

513.9 Step Meter Rate

**514 Demand Basis**

367

514.1 Hopkinson Rate

514.11 Multiple Hopkinson Rate

514.3 Wright Demand Rate

514.31 Multiple Wright Demand Rate

514.5 Three Charge Rate

514.51 Multiple Three Charge Rate

**520 DETERMINATION OF DEMAND**

324

**521 Application of Demand**

521.1 Width

323, 325, 326, 339, 341

521.2 Use for Rate Purposes

**522 Actual Measurement of Demand**

324

522.1 Maximum Demand Indicators

325

522.2 Graphic Instruments

522.3 Tests

**523 Estimated Demand**

523.1 Connected Load Basis

523.2 Area of Premises Basis

523.3 Number of Rooms Basis

523.4 Number of Outlets Basis

523.5 Taxable Value Basis

**524 Limiting Demand**

11

**530 DISCOUNTS****531 Prompt Payment Discount****532 Delayed Payment Penalty****533 Quantity Discounts****534 Length of Contract Discounts****540 MINIMUM CHARGE**

7, 9, 57, 104, 147, 167, 218, 263, 279, 346

**545 Meter Rental**

**550 LAMPS**

- 551 Initial Supply
- 552 Renewals
- 553 Allowance when not Supplied
- 554 Sale Price

**560 STANDARD RIDERS****570 TERM OF CONTRACT****580 TERMS AND CONDITIONS**

9, 80, 104, 164, 167, 218, 227, 251, 264, 265, 278

**590 MEASUREMENT OF ENERGY****600—RATE DIFFERENTIALS**

25, 147, 287, 303, 368

**610 CHARACTER OF SERVICE****611 Light**

- 611.1 Residences
- 611.2 Commercial
- 611.5 Wholesale

323

**612 Power**

72, 122, 251

- 612.1 Small Power
- 612.2 Large Power
- 612.3 Unrefined
- 612.4 Distribution Economies

28

**613 Combined Light and Power****614 Heating and Cooking**

10, 43, 72, 279

**615 Feature Rates**

- 615.1 Limited Hour Service

251

- 615.2 Development Rates

277

**616 Official or Government Rates**

9

- 616.1 Street Lighting

91

**617 Breakdown or Auxiliary Service**

252

**620 FACTORS AFFECTING RATES**

105, 123

**621 Demand Factor**

124

- 621.1 Load Factor

324

**622 Diversity Factor**

341

**623 Power Factor**

326



- 624 Lamp Service
- 625 Distance Factor
- 626 Seasonal Factor
- 627 Conjunctional Use
- 628 Quantity Use
- 629 Competition

120

**650 DISCRIMINATION**

20

**700—SCHEDULES AND SERVICE****710 SCHEDULES**

53

- 711 Form of Schedules
  - 712 Publicity of Schedules
- 9
- 713 Filing of Schedules
- 168, 308
- 714 Notice for Change of Rate
- 219
- 715 Time of Effect

**720 RATE SCHEDULES**

3, 8, 14, 20, 54, 69, 73, 83, 105, 124, 156, 163, 179 (Correction, 195), 207, 355, 371, 387

- 729 Maximum Rate

**730 TERMINOLOGY**

- 731 Electric Definitions
- 159, 307
- 733 Classifications
- 733.1 Dewey Decimal System
- 32
- 733.2 Rate Research System
- 735 Technical Data
- 735.1 Moonlight Schedules
  - 735.2 Daylight Schedules
  - 735.5 Meters
- 738 Bibliographies
  - 739 General Data

**740 COMPANY DATA****750 COMPARATIVE COMPANY DATA**

63, 149

**780 SERVICE**

- 781 Adequacy
- 95, 165, 192, 221, 366
- 781.1 Increase of Facilities
  - 781.5 Inductive Interference
- 168, 351

**782 Efficiency**

48

782.1 Regularity

782.2 Voltage Regulation

191

782.5 Lamp Efficiency

22, 382

**783 Safety of Service**

160, 221

783.1 Inspection

783.2 Reports of Accidents

783.9 Smoke and Health Regulation

**785 Accuracy of Standards****786 Tests and Accuracy of Meters**

111, 143

**788 Service Rules**

48, 64, 169, 175

**789 Kind of Service****800—MUNICIPALITIES**

45, 46, 112, 249, 319, 335, 378

**810 MUNICIPAL OR LOCAL REGULATION OF UTILITIES**

14, 46, 143, 160, 166, 352

**820 STATE REGULATION OF MUNICIPAL UTILITIES****830 PUBLIC OWNERSHIP**

15, 31, 46, 80, 94, 96, 174, 175, 190, 256, 264

**831 Purchase by Municipality**

150, 197, 374, 376, 378, 384, 393

S31.1 Municipal Bond Issues

13, 16, 96

S31.9 Municipalities—Liability for Damage

304

**840 PUBLIC OPERATION**

15, 36, 47, 62, 63, 80, 99, 143, 155, 158, 171, 175, 197, 201, 208, 236, 256, 352, 373, 383

**890 MUNICIPAL STATISTICS**

14, 15

**900—GENERAL**

94, 271, 288, 320, 335

**910 PROMOTION AND GROWTH OF BUSINESS**

176, 240, 320, 336, 383

**920 ECONOMY AND EFFICIENCY**

159, 302

**950 PROGRESS IN THE ART**

144

**960 CO-OPERATION**

144

**970 COLLATERAL BUSINESS OF UTILITIES****980 PUBLIC RELATIONS**

31, 47, 58, 64, 208, 240, 284, 399

**990 EMPLOYEES**

# ALPHABETICAL INDEX

## VOLUME 6, RATE RESEARCH

**A**

- Acquackanonk Water Co. New Jersey Commission decision re rates 343
- Adams, T. S. Valuation of railway property for purposes of taxation 335
- Albany, N. Y., Municipal Gas Co. of, F. Ray Comstock v. Decision of New York Commission (2D) re refusal of service..... 366
- Alvord, John W. Fundamental principles of public utility valuation.. 109
- American Academy of Political and Social Science. Public policies as to municipal utilities..... 319
- A. E. R. A.  
Address of President Woodrow Wilson before mid-year meeting January 29, 1915..... 320
- Committee on electrolysis. Report, 1914..... 61
- Joint committee on engineering accounting. Report, 1914..... 62
- Joint committee on joint use of poles. Report, 1914..... 61
- A. J. E. E. Standardization rules, effective December 1, 1914..... 307
- American Malt Corporation and American Malting Co. New Jersey Commission decision re merger..... 58
- American Malt Corporation et al v. Public Utility Board. Decision of New Jersey Court of Errors and Appeals re merger..... 237
- Arizona—C. C.  
Globe Light & Power Co., G. W. M. Carvel et al v. re rates..... 101
- International Gas Co. Competition case..... 67
- Arkansas—Ry. C. v. Missouri & N. A. R. Co. Decision of Circuit Court of Appeals, 8th circuit, re confiscatory rate order..... 16
- Arkansas—Supreme Court. Hunt et al v. Marianna Electric Co. Re change in type of service..... 170
- Arkwright, Preston S. Courting the favor of the public..... 31
- Ashland Electric Power & Light Co. v. City of Ashland. Oregon Supreme Court decision re city's interference with franchise rights.... 191
- Ashland Water Co. Wisconsin Commission decision, rehearing rates case..... 35
- Ashley, H. W. Discrimination in public service rates..... 10
- Aurora, Town of, Hayden v. Colorado Supreme Court decision re municipal bond issue..... 16
- Avoca, Petition of Borough of. Decision of Pennsylvania Commission re competition..... 379
- Ballard, Frederick W.  
(The) Cleveland municipal electric plant..... 62
- (The) design and operation of the Cleveland municipal electric light plant..... 335
- Baltimore, Maryland, Consolidated Gas, Electric Light & Power Co. of. Industrial gas demand rate, April 1, 1915..... 371
- Bangor Light, Heat & Power Co. et al, W. R. Grubb, et al v. Decision of Pennsylvania Commission re discontinuing heating service..... 165
- Barber, Cal. Pacific Gas & Electric Co. case re rates to Diamond Match Co. California Commission decision..... 56
- Barrett, George E.  
(The) calculation of depreciation 127
- Bath, N. Y., Petition of the Trustees of, for authority to construct municipal electric plant. Decision of New York Commission (2D).... 188
- Baum, Frank G.  
(The) best control of public utilities..... 287
- Supra*, Editorial on..... 302
- Baxter Telephone Co. v. Cherokee County Mutual Telephone Assn. et al. Kansas Supreme Court decision re protection from competition..... 400
- Bellamy et al v. Missouri & N. A. R. Co. Decision of Circuit Court of Appeals, 8th circuit, re confiscatory rate order..... 16
- Bemis, Edward W. (The) treatment of land in rate case..... 43
- Benwood, City of, et al v. Public Service Commission. Decision of West Virginia Supreme Court of Appeals re Commission's jurisdiction over franchise rates..... 204
- Berkeley—City club. Bulletin on municipal electric lighting plants in California..... 352
- Berlin Public Service Co. rates case. Wisconsin Commission decision..... 19
- Bloomer Electric Light & Power Co. Wisconsin Commission decision re refusal of service..... 347
- "Blue Sky Law," Iowa. Decision of District Court, S. D. Iowa, Central Division re..... 112
- Boonton, Mayor and Council of v. United Water Supply Co. Decision of New Jersey Court of Chancery re contracts..... 32
- Bosse, Mayor of Evansville, Indiana, on municipal ownership..... 31
- Boston Consolidated Gas Co. Massachusetts Commission decision re gas rates..... 296
- Boston "Sliding Scale" Act of 1906.... 296
- Brandt, A. M. Voltage regulation.... 191
- Bridgeport Gas Light Co., Complaint v. Decision of Connecticut Commission re extension of main..... 108
- Bridgeport Gas Light Co., McMurray et al v. Decision of Connecticut Commission re rates..... 105
- Baker, M. N. Municipal ownership and operation of waterworks..... 174
- Baldwin, Roger N. St. Louis' successful fight for a modern charter 46

**B**

Britton, John A. How utility regulation has worked out.....	128	Cherokee County Mutual Telephone Assn. et al, Baxter Telephone Co. v. Decision of Kansas Supreme Court re protection from competition.....	400
Brooklyn & Curtis Bay Light & Water Co., John E. Potee, et al. v. Decision of Maryland Commission re water rates.....	275	Chesapeake & Ohio Ry. Co. v. Public Service Commission. Decision of West Virginia Supreme Court of Appeals re adequacy of service....	192
Bucyrus Light & Power Co., rates case. Ohio Commission decision....	51	Chicago. Subways for public-utility pipes and wires in Chicago streets	271
Bureau of Railway Economics. List of publications pertaining to government ownership of railways. Bulletin No. 62.....	158	Chicago—Commercial Club. (The) public utility and the public.....	13
Burton Telephone Company. Opinion of Attorney for Ohio Commission re competition.....	349	Chicago—Department of Public Service, Electric Bureau of. Report October 1, 1914.....	79
Butler, Pierce. Valuation of railway property for purposes of rate regulation .....	334	Chicago—Sanitary District, Board of Trustees of. Proceedings, November 12, 1914.....	143
Byington et al. v. Chicago R. I. & P. R. Co. et al. Nebraska Supreme Court decision re comparative railroad rates.....	16	Chicago—Sanitary District, Report on water power development of....	175
<b>C</b>		Chicago—Sanitary District hydro-electric facts at last, by George W. Weber .....	158
		Chicago R. I. & P. R. Co. et al., Byington et al. v. Decision of Nebraska Supreme Court re comparative railroad rates.....	16
California—District Court of Appeals. First District, California. Hatfield v. People's Water Co. et al. re forfeiture of franchise.....	222	Chico, Cal. Pacific Gas & Electric Co. case re rates to Diamond Match Co. California Commission decision .....	56
California—R. R. C. Colony Holding Corporation v. Coalinga Water & Electric Co. Re extension of service.....	310	Chileno Valley Telephone Co. v. Guglielmetti Telephone Co. v. Decision of California Commission re competition .....	108
Guglielmetti Telephone Co. v. Chileno Valley Telephone Co. Re competition .....	108	Cincinnati, Ohio. Answer to report of Arthur C. King on electric rates of Union Gas & Electric Co.....	208
Half-Moon Bay Light & Power Co., Re rates fixed by contract....	389	Report on Union Gas & Electric Co., by Arthur C. King.....	131, 147
Mt. Konocti Light & Power Corporation v. James A. Gunn, Jr. Re competition.....	327	Citizens Light, Heat & Power Co., Joseph Cauffiel et al. v. Decision of Pennsylvania Commission re terms and conditions.....	167
North Moneta Garden Lands Water Co. Re water rates.....	359	Clark, W. J. (A) rambling talk on European public utility conditions Cleveland, Ohio. (The) design and operation of the Cleveland municipal electric light plant, by Frederick W. Ballard.....	335
Pacific Gas & Electric Co. extension of service.....	380	(The) Cleveland municipal electric plant. Letters by William D. Kerr, and F. W. Ballard.....	62
Pacific Gas & Electric Co. Re rates to Diamond Match Co.....	56	Cleveland's new municipal lighting plant's operating costs high?.....	94
Pacific Gas & Electric Co., W. S. Junkin v. Re safety of service....	221	Coalinga Water & Electric Co., Colony Holding Corporation v. Decision of California Commission re extension of service.....	310
Rules governing construction and operation of parallel lines. General Order No. 39.....	168	Coast Valleys Gas & Electric Co., Salinas City v. Decision of California Commission re rates.....	39
Salinas City v. Coast Valleys Gas & Electric Co. Rates case.....	39	Coleman, Henry L. Variable gas rates .....	59
San Joaquin Light & Power Corporation, S. Raney et al. v. Re extension of service.....	156	Colfax Telephone Co. Illinois Commission decision re rates.....	364
San Jose electric rates case.....	4	Colony Holding Corporation v. Coalinga Water & Electric Co. California Commission decision re extension of service.....	310
Southern Pacific Co., Application of, re increase in fares.....	115	Colorado—P. U. C. Order re filing rate schedules.....	168
Valley Telephone Co. Competition case .....	364	Colorado—Supreme Court. Hayden v. Town of Aurora. Re municipal bond issue.....	16
West Coast Gas Co. Re minimum charge .....	57	Wolverton v. Mountain States Telephone & Telegraph Co. Re rates fixed by contract.....	25
California—Supreme Court. Economic Gas Co. v. City of Los Angeles et al. Re city's power over rates.....	160	Colorado utilities law.....	12
Hubbard, People ex rel., v. Los Angeles Ry. Corporation. Re validity of franchise.....	160		
Pacific Gas & Electric Co. v. Roberts, State Treasurer, et al. Re Motor Vehicle Act.....	159		
California, Municipal electric lighting plants in.....	352		
Carolina & Y. R. R. Co. v. Armfield et al. Decision of North Carolina Supreme Court re eminent domain	272		

Commercial Club of Charleston et al. v. Missouri Public Utilities Co. Brief for respondent, before Missouri Commission.....	271	<b>E</b>	East Boston, Petition of, re rates. Decision of Massachusetts G. & E. L. Commission.....	87
Compilation of rules and regulations in re customer's deposits.....	329		Ebenezer Telephone Co. v. Milwaukee Light, Heat & Traction Co. Wisconsin Commission decision re inductive interference.....	351
Conference of American Mayors on public policies as to municipal utilities. Proceedings, November 12-14, 1914.....	319		Economic Gas Co. v. City of Los Angeles et al. California Supreme Court decision re city's power over rates.....	160
Connecticut—P. U. C.			Elk Hotel Co. v. United Fuel Gas Co. Decision of West Virginia Supreme Court of Appeals re rate differentials.....	303
Bridgeport Gas Light Co., Complaint r. Re extension of main....	168		Empire State Gas and Electric Association. Letter to New York Public Service Commission (2D) re competition.....	50
Bridgeport Gas Light Co., McMurray et al. r. Re rates.....	165		Emporia Telephone Co. Rates case. Kansas Commission decision.....	73
Consolidated Gas, Electric Light & Power Co. of Baltimore. Industrial gas demand rates, April 1, 1913.....	371		Erickson, Halford. Valuation for rate-making purposes.....	29
Cook, C. H. (The) demand rate for gas service.....	367		Erie County Electric Co., James Thompson and M. A. Hanna & Co. v. Decision of Pennsylvania Commission re contract rate.....	122
Cooke, Andrew. Financing of public utility properties.....	319		Eshleman, John M. What regulation must accomplish if it is to be permanent.....	142
Cooley, Mortimer E. (The) public utility and the public.....	13		Eugene, City of, et al., Dygert v. Oregon Supreme Court decision re liability for accident.....	160
Cory, C. L. (The) public utilities of the Pacific coast.....	159		Europe, What the labor leaders found in.....	175
Covington, Ex parte City of. Decision of Kentucky Court of Appeals re municipal indebtedness.....	112			
Cravath, James R. Accounting for depreciation.....	288			
Crosser bill, Amended report on.....	62			
<b>D</b>			<b>F</b>	
Dawes, Rufus C. (The) modern gas company as a security for bonds....	271		Federal Mining & Smelting Co. v. Public Utilities Commission et al. Idaho Supreme Court decision re inspection of company's books.....	186
Day, Charles. A constructive policy for public service corporations....	144		Ferguson, Louis A. Effect of width of maximum demand on rate making.....	323, 339
Dayton, No municipal plant for.....	175		Feustel, Robert M. Some aspects of the work of the Illinois Utilities Commission.....	93
Dayton business men oppose proposed city plant.....	31		Fitting, Ralph U. Depreciation.....	11
Delafield, Wis., Application of Milwaukee Light, Heat & Traction Co. re duplication of facilities in. Decision of Wisconsin Commission	312		Florida—R. R. C. Opinion of counsel re free or reduced rate telephone service to a municipality under franchise contract.....	220
Delaware, L. & W. R. Co. v. Van Santwood et al., Public Service Commission, (2D), New York. Decision of District Court, N. D. New York, re adequacy of service	95		Floy, Henry. Results of the war for public service commissions to consider.....	255
Des Moines, City of v. Des Moines Water Co. et al. District Court, S. D. Iowa, C. D. decision re purchase by municipality.....	384		Fredonia Natural Gas Light Co., Village of Fredonia v. Decision of New York Supreme Court, Equity Term, re forfeiture of franchise...	203
Detroit & Mackinac Railway Company et al., Michigan Railroad Commission v. Decision of Michigan Supreme Court re filing of schedules	368			
District of Columbia—P. U. C.				
Regulation for electric service. Regulation for extension of gas mains and gas service.....	260			
District of Columbia, Municipal ownership of street railways in the....	62		<b>G</b>	
Doane, S. E. Electric light—a factor in civilization.....	336		Gandolfo, I. H. (The) valuation of public utility property.....	110
Dolton v. Public Service Electric Co. Decision of Court of Chancery of New Jersey re erection of certain poles.....	16		Gassaway Gas Co., Town of Gassaway v. Decision of West Virginia Supreme Court of Appeals re surrender of franchise.....	223
Dow, Alex. (The) art of rate making	239		Georgia—Supreme Court.	
Dreyfus, Edwin D. Appraisement of small electric properties.....	391, 397		Macon Ry. & Light Co. v. Palace Amusement Co. Re breach of contract.....	223
Duncan, Thomas C. Problems before commissions.....	28		Union Dry Goods Co. v. Georgia Public Service Corporation. Re rates fixed by contract.....	302
Dygert v. City of Eugene, et al. Oregon Supreme Court decision re liability for accident.....	160			

Georgia, State of, Wadley Southern Ry. Co. v. Decision of United States Supreme Court re penalty for noncompliance with Commission's order.....	336	Hoan, Daniel W. (The) failure of regulation.....	174
Georgia Public Service Corporation, Union Dry Goods Co. v. Decision of Georgia Supreme Court re rates fixed by contract.....	302	Holliday, A. R. Rural electrical development in Indiana.....	176
Gesell, Gerhard A. Minnesota public utility rates—electric, gas and water.....	207	Holz, M. Harry. Street arc lighting prices.....	91
Gettemy, Charles F. (The) new Massachusetts legislation regulating municipal indebtedness.....	45	Humphreys, Alexander C. In rate fixing by commission should "depreciation" be deducted from plant valuation?.....	28
Gettysburg, Petition of Borough of, re construction of municipal electric plant, Pennsylvania Commission decision.....	236	Hurley Water Co., Town of Vaughn v. Decision of Wisconsin Commission re water rates.....	10
Globe Light & Power Co., G. W. M. Carvel et al. v. Decision of Arizona Commission re rates.....	101	<b>I</b>	
Goodwin, Harold, Jr. Practical economics in distribution with their effect on the commercial policy of a central station company.....	159	Idaho—P. U. C. Idaho-Oregon Light & Power Co. et al. Reduction of rates in southwestern Idaho.....	387
Gordon, F. G. R. (The) failure of government telegraph and telephone systems.....	256	Idaho Power & Light Co. Competition case.....	291
Graham, Howard S. Argument before I. C. C. for advance in railroad rates.....	158	Idaho—P. U. C., Federal Mining & Smelting Co. v. Decision of Idaho Supreme Court re inspection of company's books.....	186
Grange Hall Farmers' Telephone Co. Wisconsin Commission decision re extension of service.....	41	Idaho—Supreme Court. Federal Mining & Smelting Co. v. Public Utilities Commission et al. Re inspection of company's books.....	186
Great Shoshone & Twin Falls Water Power Co. Decision of Idaho Commission re competition.....	291	Idaho-Oregon Light & Power Co. Idaho Commission decision re electric rates in southwestern Idaho.....	387
Gruhl, Edwin. Increased taxation of public utilities.....	318	Idaho Power & Light Co. Decision of Idaho Commission re competition.....	291
Grunsky, C. E. Depreciation as an element for consideration in the appraisal of public service properties.....	173	Idaho Railway Light & Power Co. Idaho Commission decision re electric rates in southwestern Idaho.....	387
Guernsey, N. T. Effect of the war on regulation of public utilities.....	398	Illinois—District Court. E. D. Illinois. St. Louis I. M. & S. Ry. Co. et al. v. United States (I. C. C. Intervener). Re review of Commission's order.....	192
(The) regulation of municipal utilities.....	143	Illinois—P. U. C. Colfax Telephone Co. Rates case Conference ruling, No. 14, re change in rates.....	364 219
Guglielmetti Telephone Co. v. Chileno Valley Telephone Co. California Commission decision re competition.....	108	Lake Forest Water Co. Investigation of valuation and rates of. Brief of company.....	173
<b>H</b>		Monmouth Public Service Co. rates case.....	3
Hale, R. S. "Rates for street lighting and for cooking." Editorial on.....	10	Rules establishing standards of service for gas and electric utilities.....	23
Half-Moon Bay Light & Power Co. California Commission decision re rates fixed by contract.....	389	Springfield Gas & Electric Co. Electric rates.....	83
Hamilton, Stacy. (A) résumé and comparison of rate theories.....	78	Standards of gas service.....	62
Harris, Arthur M. Savings bank bonds in the light of recent developments.....	157	Indiana—P. S. C. Annual report for year ending April 30, 1914.....	282
Harris, L. H. (A) discussion of the rules of the Pennsylvania Commission.....	128	Indianapolis Light & Heat Co. re valuation. Brief of company.....	110
Hatch, H. F. Flat rate meters for heating and lighting loads.....	11	Merchants' Heat & Light Co. Supplementary rate schedule, January 1, 1915.....	179 195
Hatfield v. People's Water Co. Decision of District Court of Appeals, First District California, re forfeiture of franchise.....	222	Correction of.....	
Hayden v. Town of Aurora. Colorado Supreme Court decision re municipal bond issue.....	16	Richmond, City of, v. Richmond City Water Works. Rates case.....	40
Hemenway, Harvey E. Standardized service connection practices.....	64	Vincennes Water Supply Co., W. C. Bierhaus et al. v. Rates case.....	141
Herbert v. Griffith, Mayor, et al. South Carolina Supreme Court decision re municipal bond issues.....	96	Indiana, Rural electrical development in, by A. R. Holliday.....	176
		Indianapolis Light & Heat Co., re valuation. Brief on behalf of company before Indiana Commission.....	110
		I. A. M. E.—Committee on high voltage construction in cities. Report, 1914.....	48

International Gas Co. Arizona Commission decision re competition.....	67	Lansing, City of, v. Michigan Power Co. Michigan Supreme Court decision re company's right in street....	286
I. C. C.		Lee, George A. Duplication by municipal utilities .....	41
Examination of company's records	206	Leeds, England—Electric Lighting Department. Schedule of electric rates based on "rateable value." Jan. 1, 1915.....	355
Freight rate advance in official classification territory .....	202	Lewistown, Borough of, v. Penn. Central Light & Power Co. Pennsylvania Commission decision re rates .....	199
I. C. C.—Division of valuation. Instruction for field work in mechanical and roadway and track department .....	288	London County Council. Report of the special committee on London electricity supply .....	28
I. C. C., Argument of Howard S. Graham before, for advance in railroad rates .....	158	Los Angeles—Board of Public Utilities. Fifth annual report, July 1, 1913-June 30, 1914.....	352
Iowa—District Court, S. D. Iowa, Des Moines, City of, v. Des Moines Water Co. et al. Re purchase by municipality .....	384	Los Angeles, City of, et al., Economic Gas Co. v. Decision of California Supreme Court re city's power over rates.....	160
William R. Compton Co. et al. v. Allen et al. Re "Blue Sky Law" of Iowa .....	112	Los Angeles Ry. Corporation, People ex rel. Hubbard v. Decision of California Supreme Court re validity of franchise .....	160
<b>J</b>			
Janesville Water Co. Wisconsin Commission decision re valuation for municipal purchase.....	393	Louisiana—R. R. C. Vicksburg, Shreveport & Pacific R. Co., re adequacy of service.....	221
Jenks, Jeremiah W. (The) trend toward government management of business .....	256	Louisiana—Supreme Court. Union Ice and Coal Co. v. Town of Ruston. Re operation of ice plant as municipal utility .....	208
Jones et al. v. Berlin Public Service Co. Rates case. Wisconsin Commission decision .....	19	Louisville & N. R. Co. et al. v. United States et al. Decision of District Court M. D. Tennessee, Nashville Div. re review of Commission's order .....	224
<b>K</b>			
Kansas—P. U. C. Emporia Telephone Co. Re rates.....	73	<b>M</b>	
Kansas—Supreme Court. Baxter Telephone Co. v. Cherokee County Mutual Telephone Assn. et al. re protection from competition.....	400	McBride, R. S. Standards for gas service in the West.....	79
Kansas City Southern Ry. Co. v. Redwine et al. Oklahoma Supreme Court decision reversing Commission as to location of depot.....	160	McMurray et al. v. Bridgeport Gas Light Co. Connecticut Commission decision re rates.....	105
Kenosha Home Telephone Co., State et al. v. Wisconsin Supreme Court decision re terms and conditions....	80	Macon Ry. & Light Co. v. Palace Amusement Co. Georgia Supreme Court decision re breach of contract .....	223
Kentucky—Court of Appeals.		Maine utilities act wins.....	29
Covington, Ex parte City of, Re municipal indebtedness .....	112	Malalla Electric Co., Hubbard Creamery Co. v. Decision of Oregon Commission re rates for heating and cooking .....	279
Nashville, C. & St. L. Ry. Co. v. Commonwealth. Re failure to make report .....	95	Manchester Street Ry. New Hampshire Commission decision re rates .....	153
Kerr, William D. (The) Cleveland municipal electric plant.....	62	Manchester Traction, Light & Power Co. New Hampshire Commission decision re purchase and issue of stock .....	89
King, Arthur C. Report on electric rates of Union Gas & Electric Co., Cincinnati, Ohio.....	131, 147	Manila—P. U. C. Mrs. E. Moffat v. Manila Electric R. R. & Light Co. Re cumulative billing.....	278
King, Arthur C. Answer to report of, on electric rates of Union Gas & Electric Co.....	208	Manila Electric R. R. & Light Co., Mrs. E. Moffat v. Decision of Manila Commission re cumulative billing .....	278
King, Clyde Lyndon. (The) utilities bureau .....	46	Manufacturers' Light & Heat Co. v. Ott et al., P. S. C. of West Virginia. Decision of District Court, N. D. West Virginia re rates.....	75
Kirkville, Illinois. Illinois Commission decision in Monmouth Public Service Co. rates case.....	3	Marianna Electric Co., Hunt et al. v. Arkansas Supreme Court decision re change in type of service.....	170
Knauss, D. S. (A) suggested extension of the Dewey decimal system of classification to gas engineering .....	32	Martin, T. C. American electrical industries in 1911.....	240
Knowles, Morris. Public Service.....	399	Maryland—P. S. C. Brooklyn & Curtis Bay Light & Water Co., John E. Pottee et al. v. Re water rates.....	275
<b>L</b>			
Lacombe, C. F. (The) high intensity street lighting of European cities compared with New York.....	288		
Lake Forest Water Co. Investigation of valuation and rates of. Brief of company, before Illinois Commission .....	173		

Massachusetts. (The) cost of municipal government in Massachusetts; 6th annual report on the statistics of municipal finances. Public document No. 79.....	14	(The) Milwaukee Electric Railway & Light Co. et al., George P. Dravo et al. v. Decision of Wisconsin Commission re suburban and inter-urban railway rates.....	358
Massachusetts—G. & E. L. C. Boston Consolidated Gas Co., Complaint v. re gas rates.....	296	Milwaukee Light, Heat & Traction Co. Wisconsin Commission decision re duplication of facilities in Delafield.....	312
East Boston petition re gas rates Reading Municipal Light Plant, Application of Municipal Light Board and manager of, re electric rates.....	87	Milwaukee Light, Heat & Traction Co., Ebenezer Telephone Co. v. Decision of Wisconsin Commission re inductive interference.....	351
New Legislation of special interest to gas, electric and water companies and municipalities owning lighting plants, 1914.....	71	Minidoko Project, Idaho. Rate schedule. U. S. Reclamation Service.....	163
Northampton gas petition re rates. Massachusetts—P. S. C. Middlesex and Boston Street Ry. Co. Rate case.....	12	Minneapolis, St. P. & S. M. Ry. Co. v. Menasha Woodenware Co. Wisconsin Supreme Court decision re Commission's power over contract rates.....	395
Massachusetts—Supreme Judicial Court. Pearl v. Inhabitants of Town of Revere. Re liability of municipality for damage.....	390	Minnesota, D. & P. Ry. Co. v. Way et al. South Dakota Supreme Court decision re serving public.....	95
Massachusetts lighting companies compared.....	304	Minnesota public utility rates—electric, gas, and water, by Gerhard A. Gesell.....	207
Mathewson, Charles F. Holding companies and the public welfare.....	63	Mississippi—Supreme Court. State ex rel. Howie, Dist. Atty. v. Benson Operation of electric plant ordered continued.....	399
Mechanicsburg Gas & Water Co., Borough of Mechanicsburg v. Decision of Pennsylvania Supreme Court re water rates.....	128	Missouri—P. S. C. Commercial Club of Charleston et al. v. Missouri Public Utilities Co. Brief for respondent.....	271
Mechanicville Electric Light & Gas Co. New York Commission (1D) decision re competition.....	176	Reports of decisions. Vol. 1, Apr. 15, 1913, to Sept. 24, 1914.....	313
Menasha Woodenware Co., Minneapolis, St. P. & S. M. Ry. Co. v. Decision of Wisconsin Supreme Court re Commission's power over contract rates.....	279	Missouri & N. A. R. Co., Bellamy et al. v. Decision of Circuit Court of Appeals, 8th circuit, re confiscatory rate order.....	16
Merchants' Association of New York. Brief of, in the matter of the Stadlander and Ewold Complaints v. New York Edison Co., before the New York Commission (1D).....	395	Missouri Public Utilities Co., Commercial Club of Charleston et al. v. Brief for respondent, before Missouri Commission.....	271
Merchants' Heat & Light Co. Supplementary rate schedule, January 1, 1915.....	368	Monahan, Thomas, Mayor of San Jose, v. Pacific Gas & Electric Co. California Commission decision re electric rates.....	4
Merz and McLellan report, Report of London County Council special committee on.....	195	Monmouth Public Service Co. rates case. Illinois Commission decision	3
Michigan R. C. et al. v. Detroit & Mackinac Railway Co. et al. Michigan Supreme Court decision re filing of schedules.....	28	Moses, Percival Robert. Electric rates.....	270
Michigan—Supreme Court. Bolender v. Southern Michigan Telephone Co. Re injury to trees.....	368	Mt. Konocti Light & Power Corporation v. James A. Gunn, Jr. Decision of California Commission re competition.....	327
Lansing, City of, v. Michigan Power Co. Re company's right in street Michigan Railroad Commission et al. v. Detroit & Mackinac Railway Company et al. Re filing of schedules.....	95	Mountain States Telephone & Telegraph Co., Wolverton v. Colorado Supreme Court decision re rates fixed by contract.....	25
Michigan Power Co., City of Lansing v. Decision of Michigan Supreme Court re company's right in street	286	Municipal Gas Co. of the City of Albany, F. Ray Comstock v. Decision of New York Commission (2D) re refusal of service.....	366
Middlefield Telephone Co. Opinion of attorney for Ohio Commission re competition.....	349	Munson, C. La Rue. Some results of the public service company law.....	173
Middlesex and Boston Street Ry. Co. Rates case. Decision of Massachusetts P. S. C.....	124		
Milwaukee, City of, et al., Complaint v. Decision of Wisconsin Commission re street railway fares.....	357		

## N

Nash, L. R. Demand electric rates as affected by Commission regulation.....	207
Nashville, C. & St. L. Ry. Co. v. Commonwealth. Decision of Kentucky Court of Appeals re failure to make report.....	95
Nashville, C. & St. L. Ry., United States v. Decision of District Court, M. D. Tennessee, re inspection of company's books.....	206



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**i**

Ohio. Opinion of Attorney General on right of municipalities to sell current .....	171
Ohio—P. U. C. Bucyrus Light & Power Co., rates case .....	51
Uniform classification of accounts for electric utilities, tentative issue .....	79

Ohio—P. U. C., Opinion of the Attorney for the, re application of Middlefield Telephone Co. for certificate of convenience and necessity	349	Paterson, N. J. Public Service Electric Co. New Jersey Commission decision re rates to moving picture establishments	277
Ohio, report on municipally owned plants in the State of, by Public Service Publishing Company	80	Pearl v. Inhabitants of Town of Revere, Massachusetts Supreme Judicial Court decision re liability of municipality for damage	304
Oklahoma—Supreme Court. Kansas City Southern Ry. Co. v. Redwine et al. Reversing Commission as to location of depot	160	Penn Central Light & Power Co., Borough of Lewistown v. Decision of Pennsylvania Commission re rates	199
Omaha, City of, v. Douglas County. Decision of Nebraska Supreme Court re taxes on municipal property	96	Pennsylvania—P. S. C. Avoca, Petition of Borough of. Protection from competition	379
Omaha & C. B. St. Ry. Co., State ex rel. Winnett et al. v. Decision of Nebraska Supreme Court re filing inventory	94	Bangor Light, Heat & Power Co. et al., W. R. Grubb, et al. v. Re discontinuing heating service	165
Oneonta Light & Power Co. v. Schwarzenback et al. New York Supreme Court, Appellate Division, decision re eminent domain	256	Citizens Light, Heat & Power Co., Johnstown, Joseph Cauffiel, et al. v. Re terms and conditions	167
Ontario. (The) use of electricity on Ontario farms	383	Erie County Electric Co., James Thompson and M. A. Hanna & Co. v. Re contract rate	122
Ontario—Railway and Municipal Board. Eighth annual report to December 31, 1913	169	General Order No. 12 re publishing of Commission's rulings, regulations or orders, by public service companies	365
Oregon—District Court, D. Oregon. Ashland Electric Power & Light Co. v. City of Ashland, et al. Re city's interference with franchise rights	191	Gettysburg, Petition of Borough of, re construction of municipal electric plant	236
Oregon—R. R. C. Hubbard Creamery Co. et al. v. Malalla Electric Co. Re rates for heating and cooking	279	Lewistown, Borough of, v. Penn Central Light & Power Co. re rates	199
Salem, City of, v. Salem Water, Light & Power Co. Re water rates	9	Philadelphia, City of, v. Philadelphia & Reading Ry. Co. Re proper return on investment	252
Oregon—Supreme Court. Dygert v. City of Eugene et al. Re liability for accident	160	York Water Co. Re Commission's power over ordinance	166
Oshkosh Water Works Co. v. Wisconsin R. R. C. Decision of Dane County Circuit Court re valuation for municipal purchase	150	Pennsylvania—Supreme Court. Mechanicsburg, Borough of v. Mechanicsburg Gas & Water Co. Re rates	176
<b>P</b>		Peoples' Water Co., Hatfield v. Decision of District Court of Appeals, First District, California, re forfeiture of franchise	222
Pacific Gas & Electric Co. California Commission decision re extension of service	380	Perkins, Frank C. Mitigating electrolysis by the insulated return feeder system	44
Pacific Gas & Electric Co. California Commission decision re rates to Diamond Match Co.	56	Philadelphia & Reading Ry. Co., City of Philadelphia v. Decision of Pennsylvania Commission re proper return on investment	252
Pacific Gas & Electric Co., Thomas Monahan, Mayor of San Jose, v. California Commission decision	4	Philadelphia's transit problem, by A. Merritt Taylor	144
Pacific Gas & Electric Co., W. S. Junkin v. Decision of the California Commission re safety of service	221	"Point Fives," London, England. Address of Chairman A. Hugh Seabrook, meeting February 15, 1915	356
Pacific Gas & Electric Co. v. Roberts State Treasurer, et al. California Supreme Court decision re Motor Vehicle Act	159	Post, E. T. Public policy	127
Pacific Northwest Traction Co., F. W. Browne v. Washington Commission decision re valuation for rate making purposes	361	Powell, R. C. Gas v. electricity for cooking	43
Palace Amusement Co., Macon Ry. & Light Co. v. Decision of Georgia Supreme Court re breach of contract	223	Public Service Electric Co. Decision of New Jersey Commission re rates to moving picture establishments	277
Pasadena—Municipal Lighting Works Department. Annual report 1913-1914	99	Public Service Electric Co., Dolton v. Decision of New Jersey Court of Chancery re erection of certain poles	16
		Public Service Gas Co. Brief in re rehearing of Passaic Gas Case	334
		Public Service Gas Co. v. Public Utility Board et al. New Jersey Court of Errors and Appeals decision re rates	180, 195
		Public Service Publishing Co. Municipally owned plants in the state of Ohio	80

**R**

Rate and rate regulation library. 211,	253
Reading, Mass. Application of Municipal Light Board and manager of Municipal Light Plant, Massachusetts Commission decision re rates .....	71
Redding, C. S. (The) measurement of illumination.....	48
Reid, Clarence. (The) central station and the service meter.....	111
Revere, Inhabitants of Town of, Pearl v. Massachusetts Supreme Judicial Court decision re liability of municipality for damage.....	304
Richmond, City of, v. Richmond City Water Works. Indiana Commission decision re rates.....	40
Rochester, City of, v. New York State Railways. New York Commission (2D) decision re street railway rates for rush hours.....	360
Rock Elm, Wisconsin. Grange Hall Farmers' Telephone Co. Wisconsin Commission decision re extension of service.....	41
Rockingham County Light & Power Co. v. Clara B. French et al. New Hampshire Commission decision re relocation of line.....	200
Ruston, Town of, Union Ice & Coal Co. v. Decision of Louisiana Supreme Court re operation of ice plant as municipal utility.....	208

**S**

St. Louis, I. M. & S. Ry. Co., et al. v. United States (I. C. C. Intervener). Decision of District Court E. D. Illinois re review of Commission's order.....	192
Salem, City of, v. Salem Water Light & Power Co. Oregon Commission decision re water rates.....	9
Salt Lake City v. Utah Light & Railway Co. Utah Supreme Court decision re taxation of meters.....	32
San Francisco. Electric rate ordinance fixing rates for July 1, 1914 to June 30, 1915.....	14
San Joaquin Light & Power Corporation, S. Raney et al. v. California Commission decision re extension of service.....	156
San Jose electric rates case. California Commission decision.....	4
Sara, R. A. Another municipal electric plant supplying lighting current at 3 cents per kw. hr.....	15
Scott, Holton H. Constructive work before the N. E. L. A.....	240
Seabrook, A. Hugh. Address before "Point Fives," Feb. 15, 1915.....	356
Sealy, Robert. (The) accounting treatment of depreciation.....	61
Seattle, City of, v. Seattle, Renton & Southern Ry. Co. et al. Washington Commission decision re increase in fares.....	168
Seattle, Renton & Southern Ry. Co. et al, City of Seattle v. Washington Commission decision re increase in fares.....	168
Seattle municipal system, Report on.. Seattle's municipal railway, Some results of.....	63
Shaad, George C. Rate making.....	142
Sloan, W. F. Unit costs.....	381
South Carolina—Supreme Court. Herbert v. Griffith, Mayor, et al. Re municipal bond issues.....	96

South Dakota—Supreme Court. Minnesota, D. & P. Ry. Co. v. Way et al. Re serving public.....	95
Southern Michigan Telephone Co., Bolender v. Michigan Supreme Court decision re injury to trees.....	95
Southern Pacific Co. California Commission decision re increase in fares .....	115
Spokane County et al, Spokane & I. E. R. Co. v. Decision of Washington Supreme Court re taxation.....	112
Spokane & I. E. R. Co. v. Spokane County et al. Washington Supreme Court decision re taxation.....	112
Springfield (Illinois) Gas & Electric Co. Decision of Illinois Commission re rates.....	83
Stevens, Frank W. (The) valuation of railroad right of way.....	110
Storer, N. W. Economies in power consumption in electric railways.....	302
Strait, E. N. (The) Wisconsin Railroad Commission's method of rate making .....	333, 397
Strickler, T. J. (The) control and regulation of public utilities.....	93
Sun Prairie Municipal Electric Utility. Wisconsin Commission decision re rates .....	155
Sweet, Arthur J. Clare as a factor in street lighting.....	382
Swift, H. S. Investment bankers and public service accountants.....	60

**T**

Taylor, A. Merritt. Philadelphia's transit problem.....	144
Tennessee—District Court, M. D. Tennessee. Louisville & N. R. Co. et al. v. United States et al. Re review of Commission's order.....	224
United States v. Nashville C. & St. L. Ry. Re inspection of company's books.....	206
Thompson, Owen P. (The) public utility and the public.....	13
Toronto—Electric Commissioners. Annual Report, 1913.....	80
Townley, Calvert. Electric railway securities from the companies' standpoint .....	64
Tyson, E. H. Requirements of the public service commission covering meter testing and voltage regulation .....	13

**U**

Union Dry Goods Co. v. Georgia Public Service Corporation. Georgia Supreme Court decision re rates fixed by contract.....	302
Union Gas & Electric Co. Answer to report of Arthur C. King on electric rates of the Union Gas & Electric Co.....	208
Union Gas & Electric Co., Report on, by Arthur C. King.....	131, 147
Union Ice & Coal Co. v. Town of Ruston. Decision of Louisiana Supreme Court re operation of ice plant as municipal utility.....	208
United Fuel Gas Co., Elk Hotel Co. v. Decision of West Virginia Supreme Court of Appeals re rate differentials. ....	303

U. S.—Bureau of Standards. Annual report for year ended June 30, 1914.....	382	Walnut Creek Oil Co. et al., Hays v. Decision of West Virginia Supreme Court of Appeals, re eminent domain .....	272
Electrolysis in concrete. Technologic paper, No. 18.....	92	Warner, Charles A. What's wrong with municipal ownership?.....	190
Fees for electric, magnetic and photometric testing. Circular No. 6.....	143	Washington—P. S. C. Annual report for year ending November 30, 1914.....	285
Lead acetate test for hydrogen sulphide in gas. Technologic paper No. 41.....	240	Pacific Northwest Traction Co., F. W. Browne v. Re valuation for rate making purposes.....	361
(The) relation of the horse-power to the kilowatt. Circular No. 34. Standard methods of gas testing. Circular No. 48.....	159	Seattle, City of, v. Seattle, Renton & Southern Ry. Co. et al. Re increase in fares.....	168
Surface insulation of pipes as a means of preventing electrolysis. Technologic paper No. 15.....	92	Rules governing electrical construction .....	169
U. S.—Circuit Court of Appeals, 8th circuit. Bellamy et al. v. Missouri & N. A. R. Co. Re confiscatory rate order.....	16	Washington—P. S. C., Act relating to electrical construction and the maintenance and use of electric wires, supplemented by the.....	23
U. S.—Reclamation Service, Dept. of Interior. Minidoka Project, Idaho Rate Schedule for.....	163	Washington—Supreme Court. Spokane & I. E. R. Co. v. Spokane County et al. Re taxation.....	112
U. S.—Supreme Court. Wadley Southern Ry. Co. v. State of Georgia, Re penalty for non-compliance with Commission's order.....	336	Waterloo, Wisconsin. Municipal water works and lighting plant. Wisconsin Commission decision re rates .....	249
United States v. Nashville C. & St. L. Ry. District Court M. D. Tennessee decision re inspection of company's books.....	206	Weber, A. F. Departments and bureaus of the Commission (New York 1st D): the bureau of statistics and accounts.....	12
United States v. Skinner, et al. District Court, S. D. New York decision re immunity of witnesses testifying before I. C. C.....	384	Weber, George W. Sanitary District hydro-electric facts at last.....	158
United States et al., Louisville & N. R. Co., et al. v. Decision of District Court, M. D. Tennessee, re review of Commission's order.....	224	Weber, George W. Wanderings in Altruria .....	335
United Water Supply Co., Mayor and Council of Town of Boonton v. Decision of Court of Chancery of New Jersey re contract.....	32	West Coast Gas Co. California Commission decision re minimum charge .....	57
Utah—Supreme Court. Salt Lake City v. Utah Light & Ry. Co. Re taxation of meters.....	32	West Virginia—District Court, N. D. West Virginia. Manufacturers' Light & Heat Co. v. Ott et al., P. S. C. of West Virginia. Re rates .....	75
Utah, Utilities commission for.....	29	West Virginia—P. S. C., Chesapeake & Ohio Ry. Co. v. Decision of West Virginia Supreme Court of Appeals re adequacy of service.....	192
Utah Light & Railway Co., Salt Lake City v. Decision of Utah Supreme Court re taxation of meters.....	32	West Virginia—P. S. C., City of Benwood v. Decision of West Virginia Supreme Court of Appeals re Commission's jurisdiction over franchise rates .....	204
		West Virginia—P. S. C., Manufacturer's Light & Heat Co. v. Decision of District Court, N. D. West Virginia, re rates.....	75
V		West Virginia—Supreme Court of Appeals. Benwood, City of, et al. v. Public Service Commission. Re Commission's jurisdiction over franchise rates .....	204
Valley Telephone Co. California Commission decision re competition.	364	Chesapeake & Ohio Ry. Co. v. Public Service Commission. Re adequacy of service.....	192
Vaughn, Town of, v. Hurley Water Co. Wisconsin Commission decision re water rates.....	10	Elk Hotel Co. v. United Fuel Gas Co. Re rate differentials.....	303
Vermont—P. S. C. Biennial report, 1914 .....	352	Gassaway, Town of, v. Gassaway Gas Co. Re surrender of franchise .....	223
Vicksburg, Shreveport & Pacific R. Co. Louisiana Commission decision re adequacy of service.....	221	Hays v. Walnut Creek Oil Co. et al. Re eminent domain.....	272
Vincennes Water Supply Co., W. C. Bierhaus et al. v. Decision of Indiana Commission re rates.....	141	Westchester Lighting Co., Complaints v. Decision of New York Commission re rates.....	259
Vincent, W. G. Jr. Present value of public utility property.....	92	Whitewater Electric Light Co., Application of, re rates. Decision of Wisconsin Commission .....	218
		Whiting, Frederic J. (The) natural and market price of public utility services .....	126
W			
Wadley Southern Ry. Co. v. State of Georgia. United States Supreme Court decision re penalty for non-compliance with Commission's order .....	336		
Wallingford, Conn., Electric Works, Report for year ending July 31, 1914 .....	175		

Whitten, Robert H.
Municipal indebtedness in its relation
to municipal ownership. Report
to New York Commission
(ID) .....
Wilcox, Delos F.
Fundamental planks in a public utility
program .....
Street railway re-settlements and
negotiations for municipal own-
ership .....
Taxation of public utilities.....
Wilson, Woodrow. Address before A.
E. R. A., Jan. 29, 1915.....
Winnipeg. Another municipal electric
plant supplying lighting current at
3 cents per kw. hr., by R. A. Sara
Wisconsin. An analysis of central
station traction practice in Wisconsin
regarding rural service.....
Wisconsin—Dane County Circuit
Court. Oshkosh Water Works Co.
v. Wisconsin Railroad Commission.
Re valuation for municipal purchase
case .....
Wisconsin—R. R. C.
Ashland Water Co. rehearing, rates
case .....
Berlin Public Service Co. rates
case .....
Bloomer Electric Light & Power
Co. Re refusal of service.....
Ebenezer Telephone Co. v. Milwaukee
Heat & Traction Co.
Re inductive interference.....
Grange Hall Farmers' Telephone
Co. Re extension of service.....
Janesville Water Co. Valuation for
municipal purchase .....
Kenosha Municipal Water Plant,
Application of, re increase in
rates .....
Marion & Northern Telephone Co.,
Application of, re rates.....
Milwaukee, City of et al., Complaint
v. Re street railway fares.....
Milwaukee Electric Railway &
Light Co. et al., George P.
Dravo et al. v. Re suburban and
interurban railway rates.....
Milwaukee Light, Heat and Trac-
tion Co. Re duplication of fa-
cilities in Delafield.....
Neeah, City of, r. Wisconsin
Traction, Light, Heat & Power
Co. Re purchase of current by
municipality for resale to cus-
tomers .....
Sun Prairie Municipal Electric
Utility. Rates .....
Vaughn, Town of, r. Hurley Water
Co. Re water rates.....
Waterloo municipal water works
and electric lighting plant. Re
electric rates .....
Whitewater Electric Light Co.
Application of, re rates.....
Wisconsin—I. E. C. Oshkosh Water
Works Co. v. Decision of Dane
County Circuit Court re valuation
for municipal purchase.....
Wisconsin—Supreme Court. S. M. Ry.
Minneapolis, St. P. & S. M. Ry.
Co. v. Menasha Woodenware Co.
Re power of Commission over
rates fixed by contract.....
State et al. v. Kenosha Home Tel-
ephone Co. Re terms and con-
ditions .....
Wisconsin Traction, Light & Heat &
Power Co., City of Neeah v. De- cision of Wisconsin Commission re purchase of current by municipality for resale to customers.....
Wolverton v. Mountain States Tele-
phone Company, Colorado Su- preme Court decision re rates fixed by contract.....
Wright, E. A. Cost of distribution and overhead charges .....
Wright, H. P. When bonds come due

**Y**

York Water Co. Pennsylvania Com- mission decision re Commission's power over ordinance.....	166
Young, Allyn A. Depreciation and rate control .....	111











